



AMERICAN BUILDER and BUILDING AGE

IS THE BUSINESS
JOURNAL OF THE
ACTIVE MEN OF THE
BUILDING INDUSTRY

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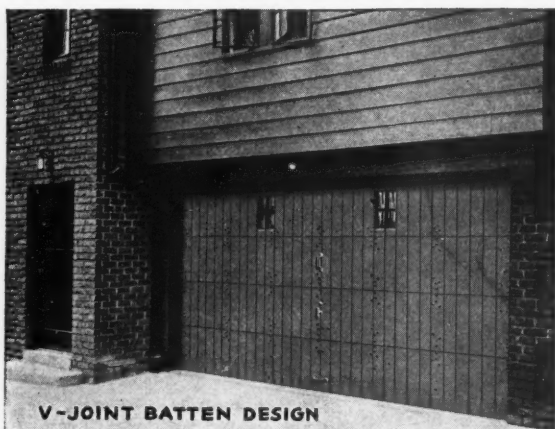
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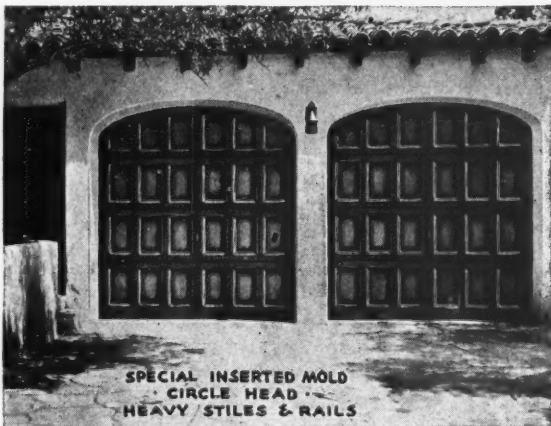
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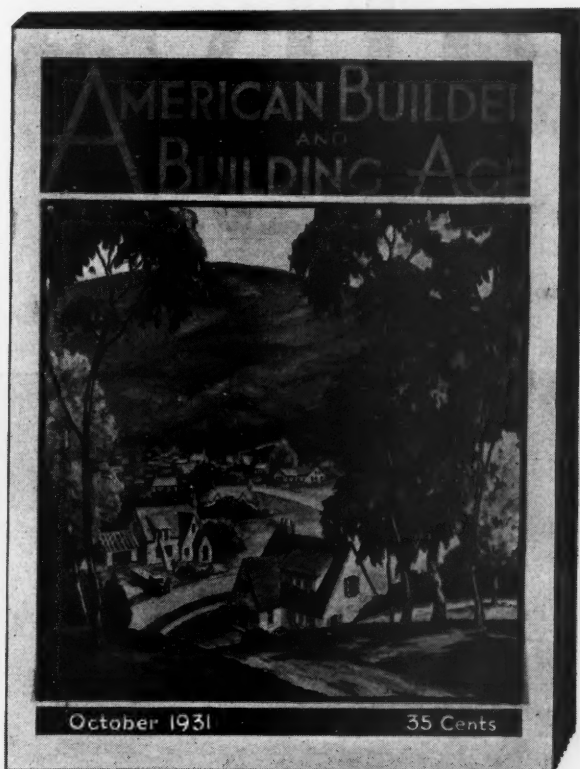


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FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE

A Campaign for Winter Building

Looking Ahead with the Editors



THE fall and early winter issues of AMERICAN BUILDER AND BUILDING AGE will be devoted editorially to stimulating winter building activity and winter work for builders. The September issue starts

this program; October will be known as our special Winter Building Number, with all emphasis placed on this very timely subject; November and December issues will continue the campaign to keep up interest and to guide and stimulate the readers in the carrying out of the program.

Winter building this year is more important than ever because of present low costs. The Industry has its best opportunity in years to interest the general public. **NOW IS THE TIME TO BUILD.** Home building and modernizing costs are down from twenty-five to thirty-three per cent. Still further savings can be made by starting work this fall and putting the jobs through during the "off-peak" season.

Put the Men to Work

In addition to this sound economic motive for launching a winter building and build-now campaign at this time, there is also the important humanitarian consideration of relieving unemployment among the building trades for the coming winter.

The editors of the AMERICAN BUILDER AND BUILDING AGE have prepared a thorough-going program of features for this winter building campaign. These, in addition to being presented in the AMERICAN BUILDER AND BUILDING AGE, will also be released to the newspapers. The assistance and co-operation of dealers and manufacturers is requested to take fullest advantage of this opportunity. Local and national advertising and publicity should tie in with this campaign. Team work will put it over.

PARTIAL OUTLINE OF WINTER BUILDING FEATURES OCTOBER AMERICAN BUILDER AND BUILDING AGE

Editorials

"Winter Work for Builders"; a resumé of the present business situation and of the opportunities offered the building industry for fall and winter activity; a challenge to the active men of the industry to fight for business NOW.

Build Now at Lower Winter Prices

Material costs are down thirty per cent. Labor costs are down and labor efficiency is up. A real need for additional housing has developed. This article is full of facts showing the real advantages of building now.

Exploding the Winter Slump Myth

Arguments — Methods — Selling — Financing. An article to wipe out the old idea that the building industry must hibernate from Thanksgiving until Easter and to send builders out working for business and creating contracts. Tested methods of winter construction will be described and illustrated, special cold weather building materials featured and the sales arguments for builders to use in contacting prospects will be marshalled for their assistance.

Shop Work for Rough Weather

Equipment — Products — Profits. The well-equipped home workshop, power cabinet shop or small manu-

facturing plant serving the local building industry has worked out well for many enterprising men connected with the building industry. This is the season when such inside shop work is appreciated.

Boost the Twin Fuel-Savers— Storm Sash and Weatherstrips

There are profits for builders on every street in homes that need storm sash, storm doors, entrance enclosures and weatherstrips to make them snug, secure and economical for winter occupancy. Some new ideas in winter windows, glass porch enclosures, weatherstripping and calking will be presented in a new and interesting way.

Winter Modernizing

Homes, apartments and business buildings offer attractive inside work for the cold weather season. A house to house survey and canvas by builders and dealers working jointly will produce surprising results. How to get the prospects, how to sell them, and how to handle winter modernizing work are fully explained in this article.

Frozen Radiators Urge Garage Building

Take advantage of the approaching cold weather to secure contracts for

garage building and garage remodeling. There is an immense market here which active local builders and dealers can easily develop. Practically every garage needs more insulation and a great many need improved doors and door hardware. This article features the latest ideas.

Insulation for Comfort

"Zero outside but comfort inside" is your timely insulation message to home owners. Make yours a one hundred per cent insulated town. Fuel savings and insulation costs charted for the guidance of builders and dealers.

* * *

In addition to the above, the October American Builder and Building Age will contain an interesting collection of home designs to meet the needs of architects, builders and dealers. The regular departments which have proved so popular and valuable with our readers will also appear. The October Winter Building Number launches the campaign and will be followed in November and December with additional winter work and winter building features. Suggestions from our readers for anything which they feel would assist this winter building campaign are requested.

—THE EDITORS.

YOUR new ally

against the jerry-builder



WEYERHAEUSER announces 4-SQUARE GUIDE-LINE FRAMING

*—precision framing lumber
for good construction*

Today the 4-SQUARE program of lumber improvement goes to work for you to protect your business and your legitimate profits against the inroads of the jerry-builder.

In current issues of leading national magazines Weyerhaeuser introduces

4-SQUARE Guide-Line Framing to the nation with the stirring announcement, "Building Blind is Ended!"

The most significant advertising campaign in home building history has begun.

The public is being taught to discriminate between right and wrong construction. Attempts have been made before to educate the homeowner-to-be in appreciating and

4-SQUARE Guide-Line Framing is manufactured in five American Lumber Standard dimensions—2×4, 2×6, 2×8, 2×10, 2×12. Each size is made in standard lengths from 8 to 20 feet.

Other improved lumber products in the 4-SQUARE Line, not shown here, come in labeled packages. They include Bevel Siding, Colonial Siding, Inch and Thick Finish, Inch and Thick Common, Drop Siding, Stepping, Flooring, Ceiling, and Mouldings in full length cartons.

4-SQUARE precision Lumber is recommended and sold by more than 1500 Authorized 4-SQUARE Dealers, leading lumber merchants from Coast to Coast.

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FENESTRA HELPS SAVE

You save material, you save labor, you save inside trim, you save refitting, you make even further savings when you use Fenestra Steel Casements.

Fenestra Screened Casements come to your jobs complete — frames, swing leaves, hardware all fitted; assembled; with bronze screens ready to attach. It is not necessary for you to buy separate frames and sash,

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By carrying the plaster direct to the window frames you eliminate the cost of interior trim. You also save refitting costs after the house is completed.

FENESTRA HELPS SELL

In fact, these better steel casements do a double selling job — they sell from the *outside* and *inside*.

Plainly seen from the outside, they stop the passer-by. They act as a selling magnet to bring in the prospects. They immediately stamp the house as modern.

And once inside, your prospects get a close-up of Fenestra Casements — see how they flood the rooms with daylight, open wide without touching the inside

screens, close snug-tight against storms, never warp, stick or rattle, wash easily from within — all advantages that sell.

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STEEL CASEMENTS SCREENED

FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE



HUGE GOVERNMENTAL COSTS THREATEN AMERICAN PROSPERITY

"THE chief cause of the present world-wide depression is the excessive expenditure of government," said the *Chicago Tribune* in an editorial in its issue of August 2. "This has diverted enormous sums of money from constructive enterprise and piled up a huge burden of debt for this enterprise and the people to carry. * * * We have steadily increased public expenditures by the nation, states, and the local communities, steadily increasing the burden of taxation upon the individual and the productive activities of the people, steadily drawing our capital away from our own uses and turning it over to the politicians and bureaucrats to spend, or, rather, waste. We are still as a nation rich; but no nation, however rich, can survive this devitalizing process."

The *AMERICAN BUILDER AND BUILDING AGE* has the satisfaction of having been one of the first publications in the United States to point out that the huge increase in government expenditures and taxation was one of the principal causes of the destruction of American prosperity, and has been the principal cause of the prolonging and deepening of the present depression. In an editorial in our issue of November, 1930, we said, "During the last decade the American people lived in a fool's paradise. They believed that the nation was enjoying real prosperity, that that prosperity would last indefinitely, and that both governments and individuals could squander money recklessly without ever paying the penalty for it." In an editorial in our issue of February, 1931, we emphasized the fact that increased taxes always fall most heavily on real estate, and that therefore it is appropriate that organizations composed of those who are the most injured by increases in the taxes on real estate should lead the fight for reductions of government expenditures and taxes. In an editorial in our issue of July, 1931, we said, "Greatly increased and still increasing government expenditures and taxes present probably the most important problem with which the American people are confronted."

It is gratifying to observe that articles and editorials

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now appearing in the press throughout the country show that leaders of public thought are being stimulated by the continuance of the depression to study of the true reasons for it, and are coming to a realization of the fact that, as this paper repeatedly has pointed out, the excessive increase in taxation was one of the principal causes of the coming of the depression, has been the principal cause of its protraction, and that continuance of unwarranted increases in government expenditures will permanently destroy American prosperity.

It may be answered that the depression is world-wide and due to world-wide causes. This is true; but it is also true that in almost all other parts of the civilized world it has been largely caused and prolonged, as in this country, by reckless socialistic government interference in business, excessive government expenditures and consequent ruinous increases in taxes.

Home Building Suffers Most

No other class of the American people is suffering so much from increased taxation as owners of residential property, whether occupied by the owners or rented to other persons. In no other industry is a revival of activity being hindered so much by heavy taxation as in the building industry. Every increase in the taxation of real estate tends to reduce its value to its owner, and to reduce the incentive of other persons to build. Therefore, every branch of the building industry, backed by owners of buildings and those who desire to own them, should be arrayed with those who are fighting to reduce government expenditures.

If taxes are to be reduced rather than further increased, it can be accomplished only by opposing and curtailing the government expenditures responsible for them. Business men unanimously agree that the burden of taxes, especially upon real estate, has become too heavy and must be reduced; but, unfortunately, when efforts are made to curtail certain kinds of government expenditures that in very large measure are responsible

for high taxes, and to shift taxes from real estate to other kinds of property that should bear a larger part of them, those who make these efforts will find certain powerful business interests opposing them.

What are the causes of high taxes? In 1924 the expenditures of the federal government of \$3,507,000,000 were the lowest since the war, but between that year and 1930 they increased \$487,500,000. A substantial part of the expenditures of the federal government are being made upon highways. From 1923 to 1928 the combined expenditures of the local and state governments increased from \$6,378,000,000 to \$8,639,000,000, or \$2,261,000,000. In 1928 \$663,100,000, or 34 per cent, of the expenditures of the state governments, and \$1,128,000,000, or 17 per cent of the expenditures of local governments, a total of \$1,791,000,000, were made for the construction and maintenance of highways.

Highway Costs and High Taxes

The foregoing statistics demonstrate that expenditures upon highways are one of the principal causes of high taxes. The claim is often made that the bulk of these expenditures upon highways, or even all of them, is made from taxes directly and indirectly derived from motor vehicles. The fact is that less than one-half of the money spent upon highways is derived directly or indirectly from motor vehicles. In 1929 approximately \$900,000,000 of it was derived from general property taxes.

The attitude toward questions of taxation likely to be assumed by those who profit in their own business from government expenditures is illustrated by a statement recently released to the press by the American Road Builders' Association. This statement was made by G. B. Sowers, commissioner of engineering and construction of Cleveland, and was as follows: "Motor vehicle taxes should be used for the benefit of motor vehicle drivers, and any diversion of such taxes to other uses than roads will be fought to the bitter end by the 26 million motor vehicle owners—one-fifth of the population of the United States." The American Automobile Association also contends that taxes on motor vehicles should not be increased and that all gasoline taxes and other taxes directly or indirectly derived from motor vehicles should be spent upon the highways.

Automotive View Too Narrow

Those who derive their business profits from the construction and maintenance of highways naturally want the maximum expenditures of both motor vehicle and general property taxes made upon them. Manufacturers of motor vehicles naturally want more mileage of wide and strong highways constructed to stimulate increased use and purchases of motor vehicles, and, at the same time, oppose any use of motor vehicle taxes that would tend to increase them, because increased taxation of motor vehicles would tend to restrict their use and sale. But how about the interests of owners of real estate and of the building industry?

Many persons own both real estate and motor vehicles, and therefore pay both real estate taxes and motor vehicle taxes. The taxes they pay on their real estate are used to help defray all the general expenses of government, such as those for police, education, etc., and also in most parts of the country are largely used for constructing and maintaining highways. Many persons who own motor vehicles do not own real estate, and therefore pay motor vehicle taxes, but not real estate taxes. Now, just why should taxes be levied on real estate for both general government purposes and highway purposes, and on motor vehicles only for highway purposes? Both real estate and motor vehicles are property. The highways which are provided for the use of motor vehicles, and which represent an enormous investment, are not taxed because they belong to the public. If, in addition, motor vehicles, which also represent an enormous investment, are not to be taxed for general government purposes, it is obvious that all the taxes for general government purposes must be paid by owners of other property, and that, in consequence, as is actually the case at present, other property will be subjected to a crushing burden of taxation largely because the owners of motor vehicles do not pay their equitable share of taxes for both general government and highway purposes.

Homes Sacrificed to Superhighways

The effects that must be produced, and actually are being produced, upon the value of real estate and upon building construction is obvious. The excessive taxation of real estate reduces its earning capacity and value, and thereby burdens and hinders the improvement of real estate, including the construction of buildings upon it. It may be said that improved highways increase the value of much real estate by making it more accessible for business and residence purposes. This is true if the improved highway is actually needed by and useful to the owners of real estate, and if the taxes levied upon the real estate to improve the highway are not excessive. But suppose the highway is not one constructed at low cost merely for the use of private automobiles, but is one constructed at great cost, as is occurring all over the country, to make it strong enough for the use of huge motor buses and trucks carrying passengers and freight for hire. When real estate suitable only for residences or ordinary business purposes is taxed to help construct the super-highways required by huge buses and trucks its value is reduced by the increased taxation out of all proportion to the benefits, if any, derived by its owners from the construction and maintenance of the highway, and at this point the conflict between the interests of real estate owners and the building industry, on the one hand, and of the motor vehicle industry, on the other, becomes direct and obvious.

The reasons why owners of real estate and the building industry should, in their own interest, demand reduction or even abolition of general property taxes

for highway purposes are as obvious as the reasons why road builders and the motor vehicle industry seek to prevent increases in the taxes upon motor vehicles and to have all motor vehicle taxes spent upon the highways. The former policy would tend to increase the value of real estate and to encourage building, while the latter would tend to benefit road builders and motor vehicle manufacturers at the expense of property owners in general, and of owners of real estate and the building industry in particular.

"Hard Road Crazy"

The attitude of road builders and manufacturers of motor vehicles toward taxation has been cited as an illustration of the difficulties that will be encountered by those who try to secure reductions of taxes upon real estate, partly because the road builders and manufacturers of automobiles have made their attitude so plain, and partly because highway taxes have become within recent years so very large a part of total taxes. Nobody opposes the construction of highways where they are needed by the public, provided they are the kind of highways the public needs. The enormous increase in taxes that has occurred in this country shows, however, that there is a limit to the amount of government expenditures for highways or any other purpose that the taxpayers can stand, and that in future proposed government expenditures of all kinds must be scrutinized much more closely to determine whether they are justifiable either in amount or purpose. No government expenditures are ever justifiable unless the public will derive benefits from them proportionate to their amount, and unless the benefits from them will be divided as nearly as practicable among those who must pay the resulting taxes in proportion to the taxes they will have to pay.

Reduce Government Expenditures To What the People Can Afford

These principles have been utterly disregarded during the last decade. Government expenditures have been increased with a recklessness indicating that those responsible for them have believed that unlimited taxation was the royal road to boundless national prosperity. The resulting taxes have been forced upon different classes of property owners in disregard of every sound principle of equity and economics. The resulting burden of taxation has fallen with crushing weight upon the people, and especially owners of real estate and other forms of visible property.

For the solution of the problem presented by the present wholly inequitable and enormously excessive taxation the people cannot rely upon politicians, many of whom seek to gain votes by squandering public money, or even upon business leaders unless they are engaged in lines of business that lose rather than gain by reckless public expenditures and inequitable taxation. The solution of the problem can be brought about only by a general uprising of the people against both in-

equitable and excessive taxation. Government expenditures must be reduced to what the people can afford. Taxation must be made equitable upon different kinds of property. Powerful interests will oppose these policies for their own selfish purposes; but those who are suffering from and being threatened with ruin by excessive and inequitable taxation must show they are at least as resourceful and courageous in opposing it as those who are now benefiting by it are in trying to perpetuate it.

PLANNED PRODUCTION NEEDED

THE building industry and the American nation are suffering from a devastating surplus of goods. Our markets are glutted with too much cement, steel, wheat, oil, brick, coal and a host of manufactured products including, of course, the radio and the automobile. There is grim humor in the fact that in this land of plenty men are starving because there is too much food, going in rags because there is too much clothing. All because machinery and mass production have been allowed to run riot without plan or program.

Unplanned, uncontrolled expansion of our major industries has built up a potential producing capacity far in excess of the present purchasing power of the public. The automobile industry, for example, is capable of producing more than 8,000,000 units, or almost twice the sales of the past year. Our cement plants can make 270,000,000 barrels of cement a year, whereas in the best times ever known annual sales never totalled more than 175,000,000, and last year were only 159,000,000. The 160,000 contractors and 4,000,000 workmen of the building industry are equipped and well able to produce billions of dollars worth of construction that the country is unable or unwilling to absorb at this time. The result is price cutting and bitter competition.

Overproduction is a double edged sword, striking the worker through unemployment and the employer through overhead costs. Factories and plants built to produce a big volume of output lose money when that output is curtailed. When a plant is working at capacity, overhead costs are easily taken care of. When the plant operates at one-third or one-half capacity as so many now are, or is shut down entirely, those overhead costs mount in a paralyzing way.

It is obvious that the building industry cannot prosper without others doing so also. We are therefore vitally concerned with this problem of overproduction.

Underconsumption of Building Commodities

Homebuilding has passed through the overbuilt condition of a few years ago and is now suffering not from overproduction but from *underconsumption*. There is a distinct difference: people are failing to build. The same is true in many other divisions of building. There is an actual need for new work and modernizing of old. But the public has not yet regained confidence enough to

go ahead. People are marking time, waiting for general business conditions to take a turn for the better. When that happens, this pent up demand will be let loose in a flood of activity.

This condition is not true of many of our industries, such as for example, the shoe business which is equipped to turn out 900,000,000 pairs a year while at present the nation buys only 300,000,000. Even if shoe consumption were doubled, one-third of the factories would still lie idle. In numerous other industries plant capacities are not only in excess of buying power but far exceed present or future needs, even if people had plenty of money. Such over-development shows a reckless disregard of the consuming needs of the nation and heightens the widespread distress of depression. It shows better than any treatise on modern economic theory the need for better planning and control all through the framework of American industry.

Planned Production and Stabilized Prices

The only solution to this problem is *planned production* or a deliberate, well worked out program of industrial co-ordination and co-operation. There are two probable paths open. One calls for a program of increasing governmental powers leading toward Socialism. The other, and to us much more desirable path, calls for expansion of trade association activities permitting industry to control itself. Industry should be encouraged to solve its own problems rather than expect governmental interference. It is well able to do so through the present machinery of the trade association, if these associations are given more power by revision or repeal of the anti-trust laws. At present they are hampered and restricted in a way that prevents strong leadership.

Destructive price wars that are now almost paralyzing the productive end of the construction industry are potent examples of what lack of proper control does. The trade associations are not allowed to discuss *prices*, the sore spot of business. They have done all they could to prevent demoralization of their industries, yet it is obvious that much more power and leadership are necessary.

Industry Receptive to Quality Ideas

Right now with building at a low ebb manufacturers and their trade associations should be especially active in education and promotion. Architects, builders and dealers can now be interviewed with greatest effect, for they have time to study new methods, new materials and equipment. It is a time when producers should be working night and day to promote *quality construction, better architecture, easier methods*, instead of that their energies are being fruitlessly wasted in price warfare that destroys rather than builds up.

Better organization and control are needed equally among contractors and builders. The next building boom must not be allowed to repeat the mistakes of the past. Builders must organize to promote quality work, ethical practices, fair prices, fair wages. They

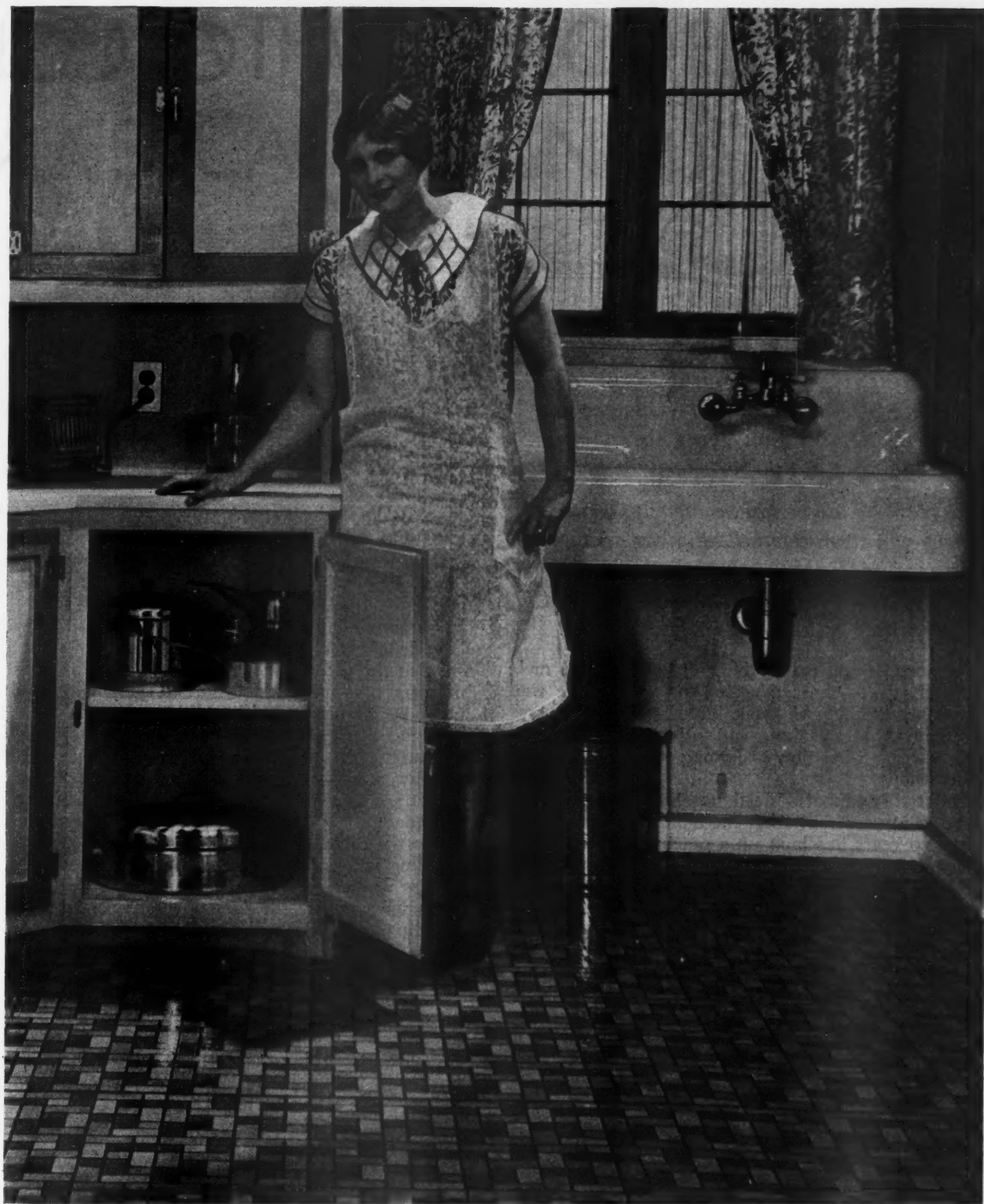
should work with groups of architects, dealers, realtors and financing institutions to make surveys of the building needs of their communities, and then should take steps to prevent over-expansion. The need for organization, co-operation and *planning* is nowhere more acute than in the construction industry today.

THE CONTRIBUTION OF BUILDING AND LOAN ASSOCIATIONS

OUR friends, the building and loan men, have just celebrated their centennial anniversary. The past hundred years has been one of increasing success for them and particularly during the past ten years their growth has been rapid and gratifying. Membership in building and loan associations now totals nearly twelve and a half million individuals in this country and their total assets comprise nearly nine billions of dollars. Recent losses in this movement have been negligible, representing only .0266 per cent of total resources, and the soundness and stability of building and loan associations has been one of the bright spots in this present depression. When we consider that building and loan associations have been responsible for the erection of 8,000,000 homes in this country, we begin to realize what an important factor they are in the building industry.

What part will they play during the coming months in helping to stimulate residential construction? This is a question not easy to answer because local conditions differ; what one building and loan association is doing in one community, another association may be unable to do somewhere else. It may be said that building and loan associations, like many other organizations, believe that they will have to await a return of public confidence before they can reach their fullest usefulness. Last year they showed a healthy increase in the number of shareholders; but, on the other hand, there were some foreclosures, demands for withdrawals, and requests for re-financing. Conservative financing is the backbone of this whole building and loan movement and, in spite of a great need for funds in the residential field, most building and loan men will probably follow a conservative lending policy in the coming months, lending only on such structures as they deem advisable and necessary, and in conservative amounts. It is also likely that they will use greater care than ever in examining risks and in supervising construction. As public confidence develops and people place more money in building and loan associations, when cash withdrawals decrease and mortgage holdings are gradually liquidated we may expect building and loan men to increase their extensions of credit proportionately.

But, at any rate, our friends, the building and loan men, will undoubtedly continue their splendid co-operation with all reputable builders—those builders who can conceive and execute only one kind of house construction . . . good construction . . . the kind that affords the best of security for a money loan.



The Wise Builder Caters to the Women

For hers is the hand that rules the home, and her wishes control in most home improvements, home building and home buying. Remember the preferences and desires of the housewife when you plan and build!



HOW TO CON- AND

SEPTEMBER, October, November—three of the best months of the year. Cool, invigorating, ideal for building work. Are you going to DO SOMETHING to pep up business? Or are you going to sit back and let it peter out through force of habit?

THIS IS the first of two articles written to help you stimulate fall building activity. Business is lurking around the corner: load up with this selling ammunition and go gunning!

THE poet Bryant called the Fall months "the melancholy days—the saddest of the year." He was probably thinking of those builders who start laying off men about this time and sit around with long faces wondering what they are going to do to keep out of the poorhouse.

The next three months need not be melancholy for builders. Statistics show that the building inactivity of the past two years has built up a potential demand that is merely waiting for a little prodding to turn into real business. There is work in store for those men who will get busy and sell.

Instead of laying off men, the thing to do now is to send them out soliciting fall business. Instead of complaining, get started on a lively selling campaign.

Intelligent use of Uncle Sam's postmen is probably the most inexpensive and most effective way to drum up business. There are hundreds of people in your community who have a potential building need. The purpose of mail advertising is to bring that need or desire out into the open in such a way that the prospect will call on you for what he wants.

There are four requirements for a good fall letter campaign. They are: (1) Use a good list of prospects; (2) Plan the whole campaign in advance; (3) Write first class letters and enclose equally good stuffer material; and (4) Follow up the letters with a program that will turn replies into sales.

How to build a prospect file was told in an article in the January, 1931, AMERICAN BUILDER AND BUILDING AGE. If you haven't a good mailing list this article will tell you how to build one. It is enough to say that a mail selling campaign can be no better than the list used. A poor list wastes good material. It will save you money to check all names and will keep you from throwing away expensive advertising.

Haphazard selling by mail is worse than useless. Many builders (and other business men as well) have wasted their money by sending out letters without having a definite plan. To go ahead blindly just because

you feel it is a good time to do some advertising will not get you anywhere.

Decide beforehand how much you can afford to spend. Budget that money carefully so that a certain number of letters can be sent at certain periods. Plan the campaign to extend say from now until December 15. Set a goal, and hammer away at it. Before the first letter is sent, know what is going to follow it up.

Now let us consider what a good selling letter should say.

First of all, be definite. Make up your mind what you want to sell the prospect, say so plainly, and don't be afraid to ask for the business. The worst weakness of most letters is their indefiniteness. Don't deal in generalities. Pick a single topic, and stick to it.

For example, instead of wasting a bunch of big words on the delights of owning a home, make a definite proposal that the prospect build a certain type of house by Christmas, presenting it as a gift to the whole family.

Or take a specific subject, like adding a new sun porch, and dwell on that alone. Don't wander off into side matters. If you are trying to sell a sun porch in that letter, stick to sun porches, and be sure to give the prospect a chance to reply. That is a point of extreme importance: always ask for a definite reply, and make it easy for the prospect to do so. Some good subjects for fall selling letters are suggested on the next page.

Before we take up the actual writing of the letter, let us consider a few of the fundamental rules of good letter writing. There are plenty of good textbooks on the subject if you want to go into it thoroughly, but briefly we can sum them up as follows:

First: Make the letter neat, correct in form, on good stationery having your letterhead artistically printed. Avoid careless typing or blurred printing.

Second: Consider the reader's viewpoint. Try to put yourself in his place. What will interest him most? What will he get out of it? Cut out the "I" and bring in the "You." Make your letter fit the man or woman who will read it.

Third: Get into the heart of the matter at once. Don't fool around with introductory paragraphs: say what is most important *first*. Say it clearly, briefly.

Fourth: Select one idea or one subject and stick to it. Don't try to cover too much ground. State your idea forcibly and without any apology.

Fifth: Be logical, develop your idea step by step. Analyze your service or your product beforehand so that you can support your statements clearly.

Sixth: Be brief: make sentences short, paragraphs only a few lines, the whole letter not more than 200 words, preferably less. Give punch with brevity. After the letter is written, prune out sentences and phrases that aren't necessary or that do not help develop the one BIG idea.

Seventh: Avoid overworked, old-fashioned phrases such as "I beg to state" or "the favor of a reply will be

DUCT A FALL MODERNIZING SALES CAMPAIGN BY MAIL

appreciated." Use your own everyday language; be natural, matter of fact. Write just as you would talk if the prospect were before you.

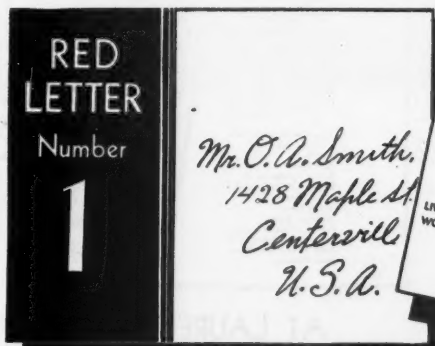
These rules will help. But remember this: you can't make the rules write the letter. Put your own personality into the job. Any man who has brains and ability enough to be at the head of a building business has *personality* enough to put punch in a letter if he will try. You can hire men to write letters for you, but you can't get them to express your ideas as effectively as you yourself can if you make up your mind to it.

One thing to avoid, or to handle with extreme care, is attempted humor. So many beginners resort to it that it is a dead give-away. Cheap wise cracks won't sell a house, and a letter that attempts to be funny throughout is usually a bore to the reader. An opening sentence or two that has some element of wit or surprise may be all right, but stop at that. Always keep in mind that the chief purpose of your letter is to sell your service; don't be afraid to state your message bluntly. If it doesn't interest the prospect, no amount of wise-cracking will.

Another danger to avoid is the over bashful or too obsequious letter which hides what the writer has to say in a flow of words and never does come to the point. Don't try to conceal the fact that you are asking for business. Come right out and say so. Don't be faint-hearted. And be sure to give the reader a chance to reply by *asking for an answer at once*.

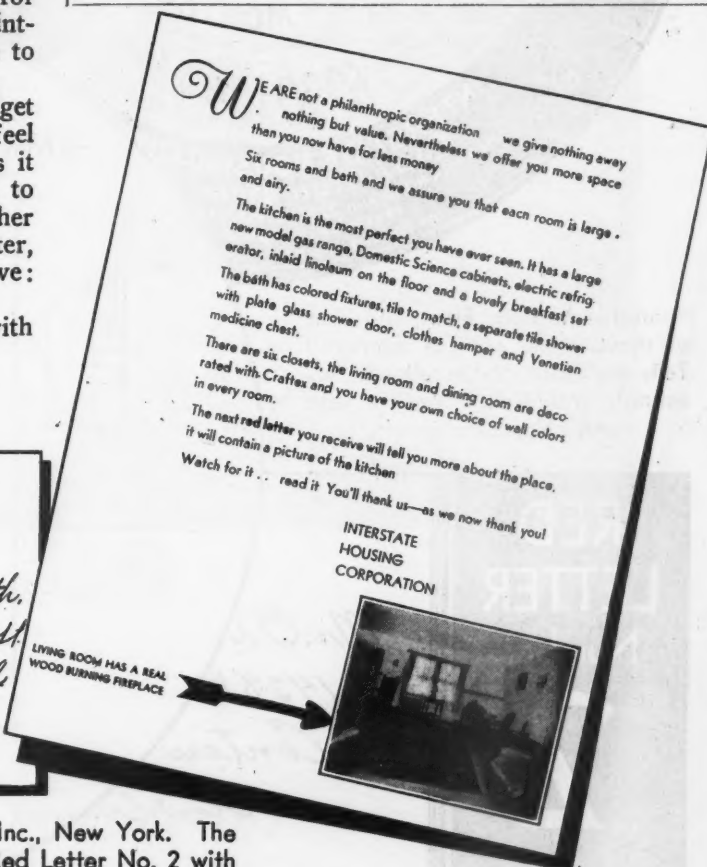
Now we have considered all these matters, let's get down to brass tacks and *write the letter*. If you feel inspired, dash it off all at one sitting. But perhaps it will be better either before or after it is written, to check it against some sort of formula to see whether everything is there that should be. If it is a good letter, the following eight points will be covered. It will have:

1. A greeting or salutation.
2. An opening sentence that makes a contact with the reader.
3. A brief statement of reason for writing.
4. A description of what you have to sell.



Live Subjects for Fall Sales Letters

- A New Home Before Christmas.
- Add a Sun Porch This Fall.
- Modernize the Kitchen.
- A Spare Room in the Attic.
- Make the Basement a Play Room.
- Modernize the Bathroom.
- A Tight Roof for Winter.
- New Floors in Every Room.
- More Windows, More Sunlight.
- Closets, Cupboards, Book Cases.
- A New Overcoat for the House.



Excellent Sales Pieces Sent Out by Laurelton Homes, Inc., New York. The visual appeal excites curiosity so that prospects await Red Letter No. 2 with interest (see next page). Planned to stress "features no landlord can give" and "comforts and conveniences your money entitles you to", these letters were mailed to rentpayers in better class neighborhoods.

5. A strong argument in favor of your service or merchandise.

6. A frank request for specific action.

7. A friendly, active wind-up.

8. Your signature and firm name.

To illustrate, let us prepare a real sales letter designed to interest a prospect in modernizing her kitchen. We will follow the formula as follows:

Greeting Dear Mrs. Smith:
Contact Have you ever counted the steps you must
Sentence take in your kitchen to prepare even a simple meal? You'll agree they are quite a few, won't you?

Reason for Writing

Description of Service

Request for Action

I'm writing you because I would like to help you reduce those steps. I can do that by having our kitchen expert recommend a scientific arrangement worked out from experimental tests in thousands of homes.

Description of Service By adding a cupboard, moving a fixture, perhaps reducing the size of the room, we can actually cut the steps in half. We have done it many times. At the same time, by redecorating, cutting in an extra window, or providing one of the new "comfort" floors we will make your kitchen a much more happy spot for you.

Request for Action We'd like to show you what a surprising amount of improvement we can make with just a little work. Drop the enclosed card in the nearest mail box and we'll send our kitchen expert to consult with you. He'll be glad to give you the benefit of his wide experience. At no cost to you, of course.

Friendly Wind-up The day of unnecessary kitchen drudgery is rapidly passing, and low building costs this fall make it an especially opportune time for modernizing. If you want less work, call on us.

Very truly yours,

Signature

Firm Name

American Building Company.

(Other sales letters for use in your fall campaign will appear in the October AMERICAN BUILDER AND BUILDING AGE, together with data on following up inquiries.)

Printed in Red and Black, This Side of the Circular (12" in diameter) Tells the story of Laurelton Interestingly and Well. Specific data and prices are given.

RED
LETTER
Number
2

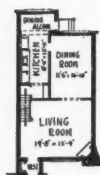
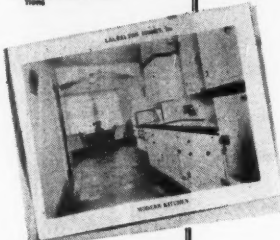
Mr. O. C.
1428 W.
Center
U.S.A.

Read all of this folder
It will take you but a few minutes
It May Mean a Lifetime of Happiness to You!

FEATURES that No Landlord Can Give You

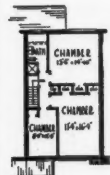
SEPARATE ROCK-FACE GARAGE
ELECTRIC REFRIGERATOR
CUSTOM-BUILT KITCHEN CABINETS
COLORED TILE BATH AND FIXTURES
LOG BURNING OPEN FIREPLACE
AUTOMATIC WATER HEATER
CONCRETE STREETS AND DRIVEWAYS

6 Large Rooms
Ventilable with Clean
Closet
Furnished Breakfast Room
Linoleum Flooring (Kitchen
and Breakfast Room)
Colored Enamel Gas
Range
Panel Decorations
Chestnut Trim (1st Floor)
Double Floor 7'6" Oak
Throughout
Chromium Plated Sittings
Chromium Medicine Cabinet
with Venetian Mirror
Separate Tile Shower with
Plate Glass Door
Pantry
Oak Stairs
Built-in Ironing Board
Built-in Clothes Hamper
in Bathroom
Steam Heat
Jadefield Butler
Porcelain Tubs in Laundry
Murray Hill Clothes Dryer
Extra Heavy Floor Beams
Brass Plumbing



First Floor Plan

DIRECTIONS TO PROPERTY
56 minutes via L. I. R. R. from Penn.
Station, N. Y., or Flatbush Ave., Bklyn.,
to Levenson Station. By Auto, Merrick
Rd. to 229th St. Or Sunset Highway to
229th St. follow signs. Or Park Road
to Springfield Boulevard turn right
to Merrick Road, turn left to 229th St.



Second Floor Plan

AT LAURELTON
YOUR DOLLAR
BUYS MORE

Curiosity aroused by Red Letter No. 1 Made
No. 2 of the Series Read with Interest.

The Photograph Plus Concrete Details About Floor Plan, Con-
struction Details, Materials, etc., Make This Folder Valuable.



Homes of Individuality

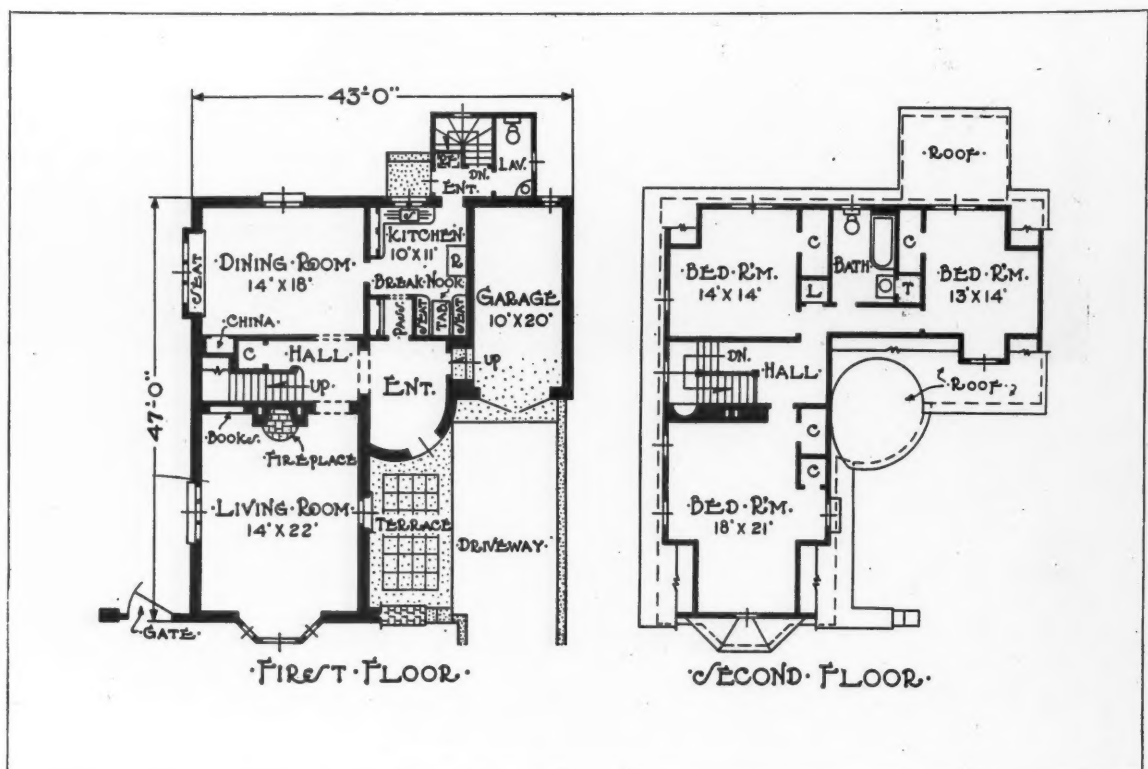
Twelve Home Designs of
Popular Size That Mirror
Personality and Charm.

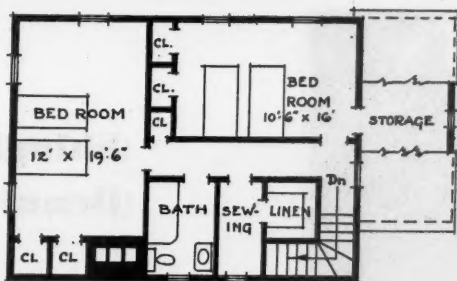


D. WENTWORTH WRIGHT, Architect

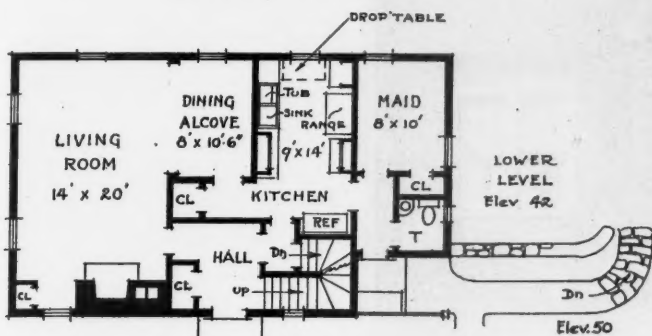
A Little Norman Cottage

This little gem in brick and wood carries an irresistible appeal from the foundation of its cute and saucy tower to the ridge of its handsomely slated roof. Here is revealed a clever, but not overdone, use of detail, and a shrewd sense of how to combine materials.





SECOND FLOOR PLAN



FIRST FLOOR PLAN

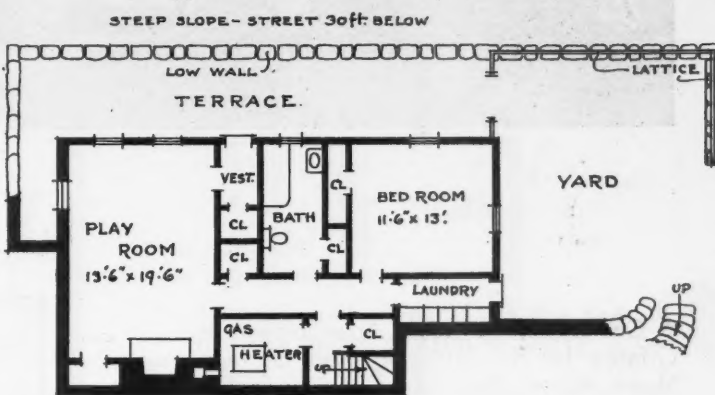
Unusual Treatment

Erected on a steep hillside, the front of this house displays unique treatment in the placing of its windows and the relation of the chimney mass to the other elements of the design. A study of the floor plan shows that the designer followed a clear and logical course. With its three levels, this home is extraordinarily replete with extra room and closet space. Note the presence of a playroom with fireplace on the lower level and of a sewing room on the second floor. The panelling of the living room and fireplace is handsomely done as is shown by the photo above. The living room window shown in this illustration is recessed.

HENRY S. PITTS, Architect

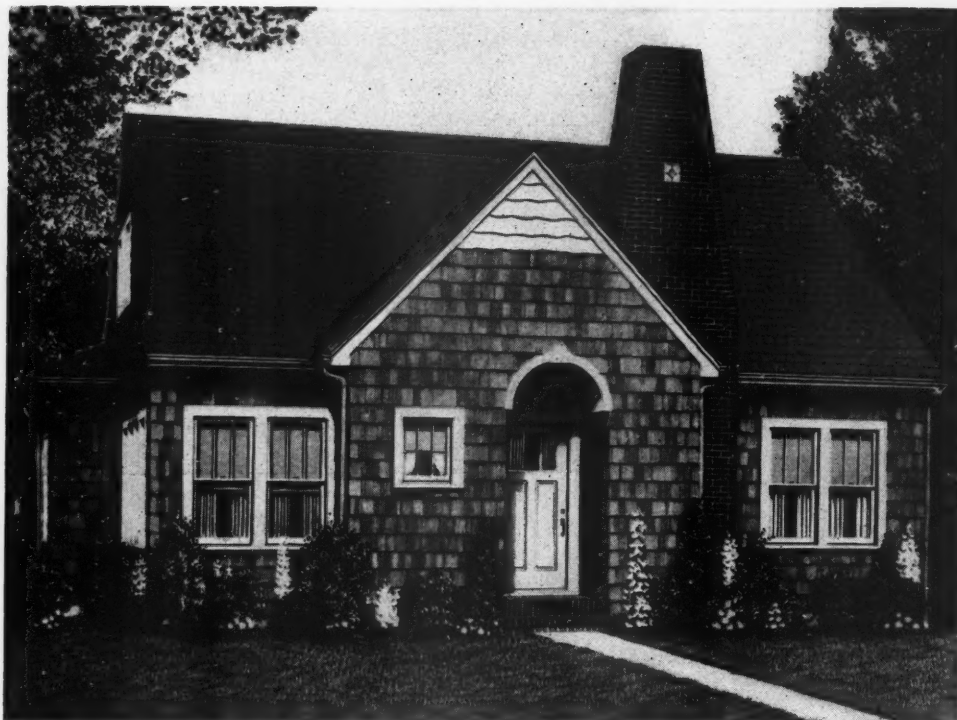


LOWER LEVEL PLAN



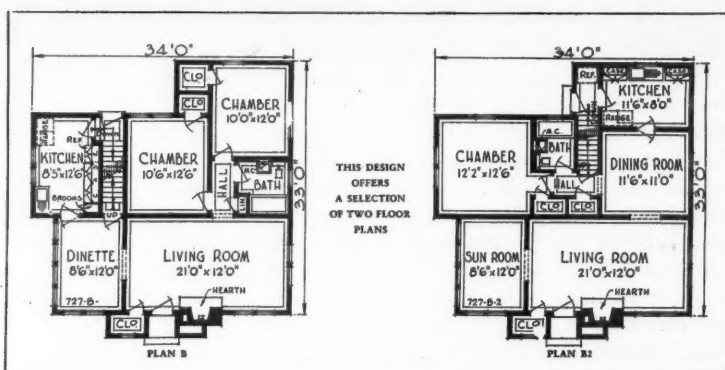
Residence of
MRS. N. M. SAFFORD
Milton
Massachusetts



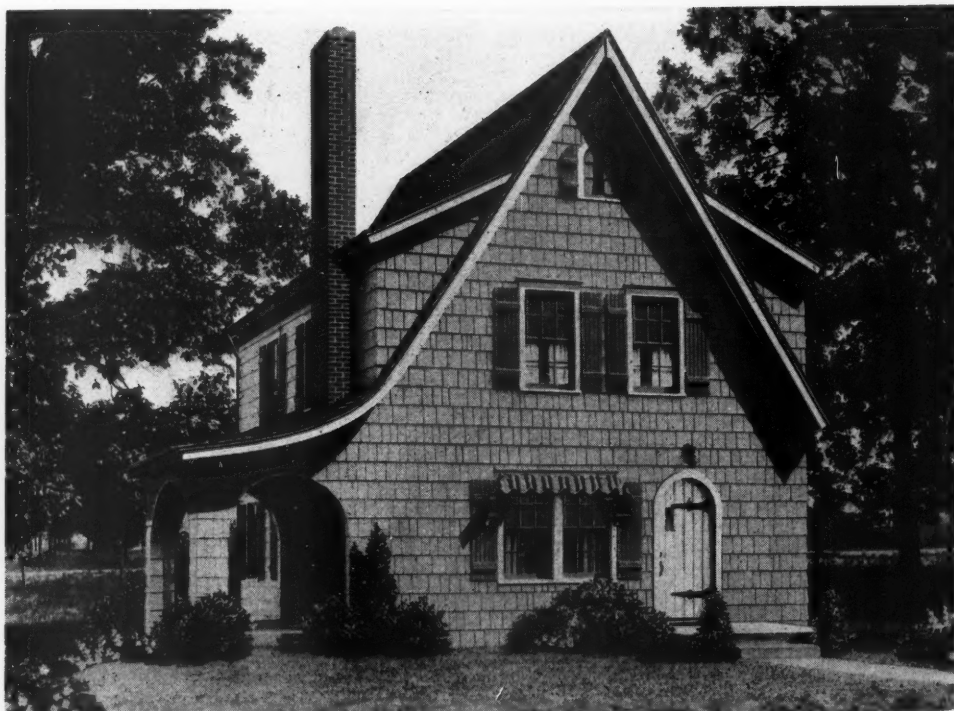
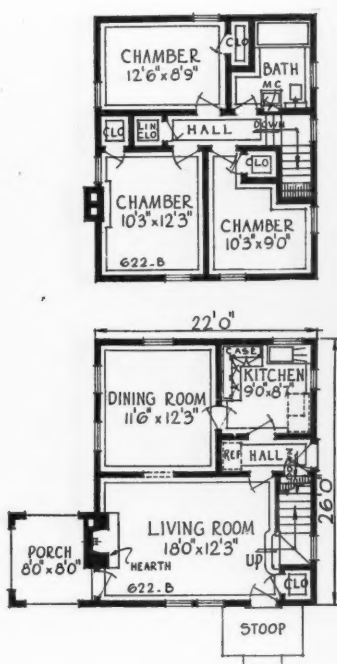


Shingled Beauties

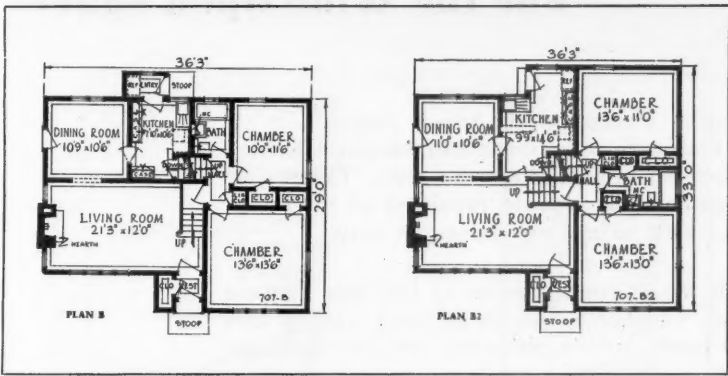
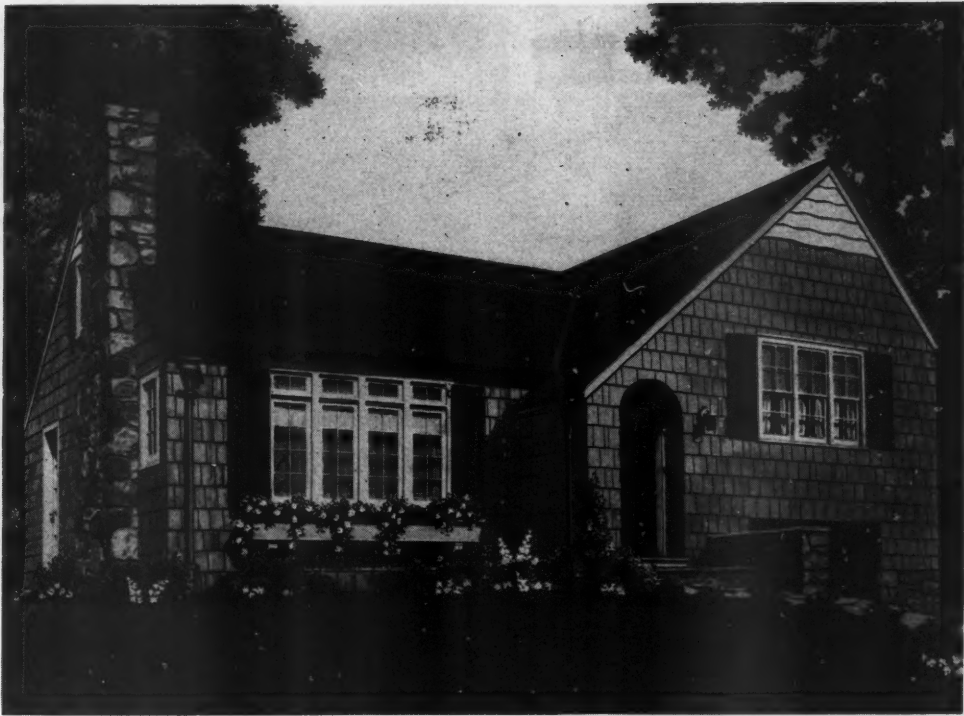
A Choice of Two Room Arrangements Is Offered for the Little Shingled Cottage Shown Above. Below is the popular English cottage of small size and low cost.



NATIONAL PLAN SERVICE Designs, Chicago

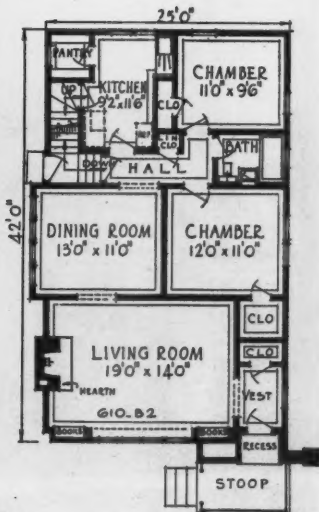
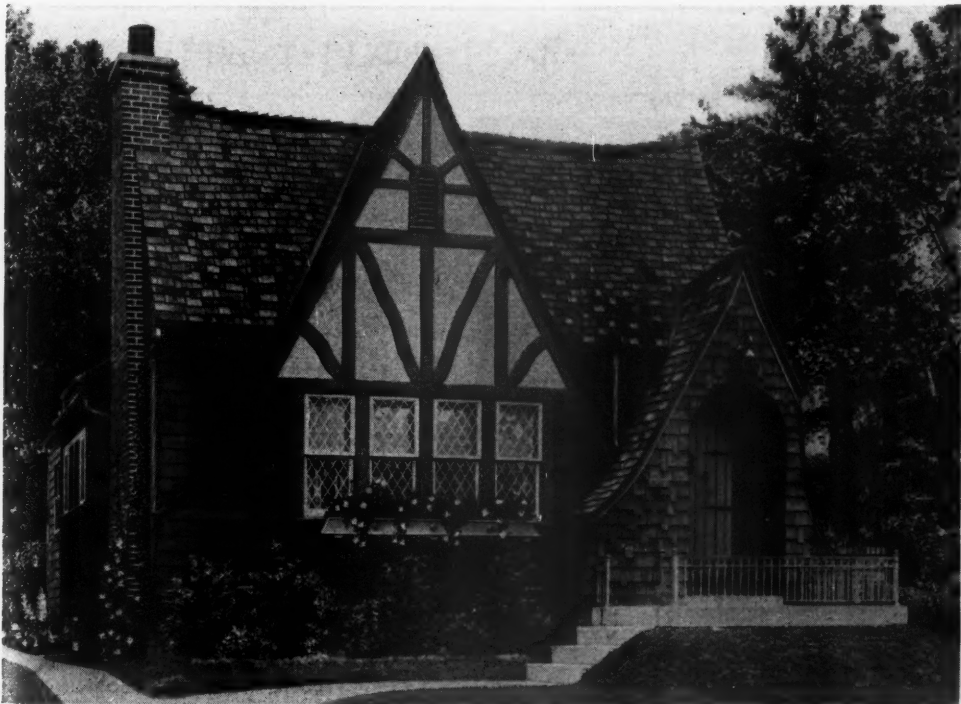


Small but
Pleasing



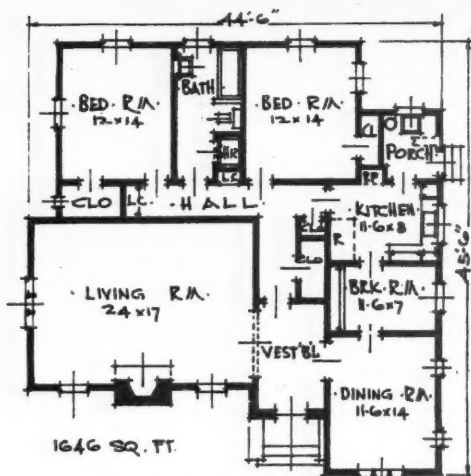
By Adding Four Feet Onto the Rear of This Plan Shown at Extreme Left a Larger Kitchen and Back Bedroom Are Secured—See Plan B2 at Right. Below is an art-study home.

NATIONAL PLAN SERVICE Designs, Chicago





A. B. CLEVELAND Designs, Los Angeles

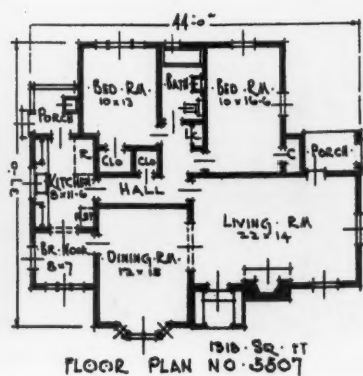


FLOOR PLAN NO. 5532

For the Wide Open Spaces

The English Stucco Design Shown Above with its Siding Gable, Brick Entrance and Massive Chimney Will Carry an Appeal to Home Lovers. The interior has been carefully planned providing all the essentials to making housework easy.

Below is the Western Version of the New England Colonial. This home, with its shingled exterior, uses window boxes, shutters and porch seats to advantage.



FLOOR PLAN NO. 5507



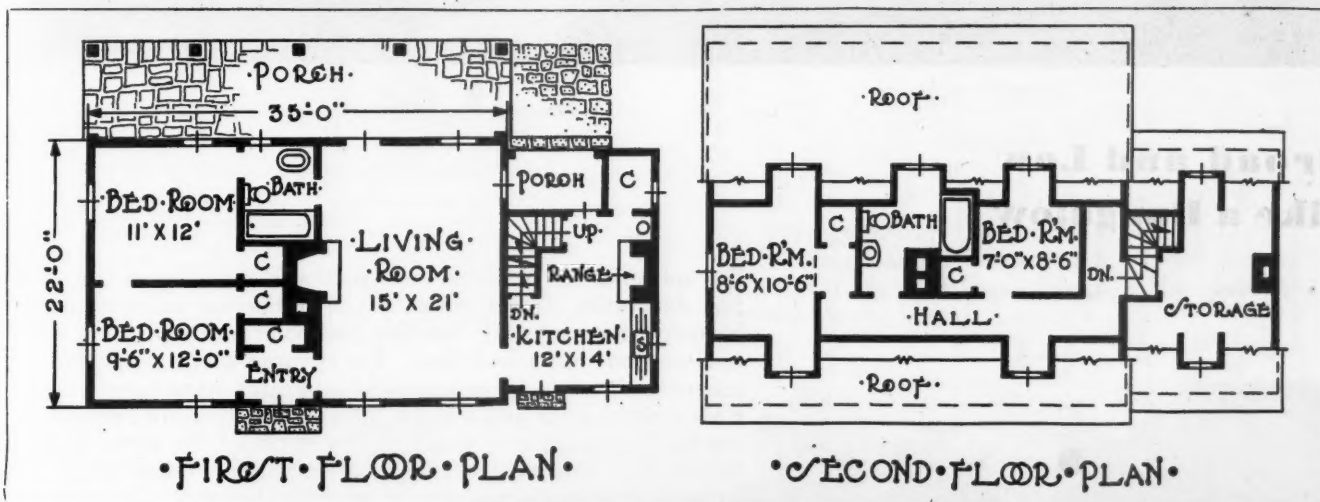
Cape Cod Colonial

A CHARMING
COTTAGE STYLE

Residence of
RUDOLPH ISELIN
Holbrook, Long Island

TRAINOR & FATIO
Architects

It is unfortunate that more small homes throughout the country do not take their inspiration from the Cape Cod style. In the cottage shown on this page, the style is produced in all its beauty, including roof line, dormers and simple entrance. Green and white is the exterior color scheme, the roof being stained to match the shutters.



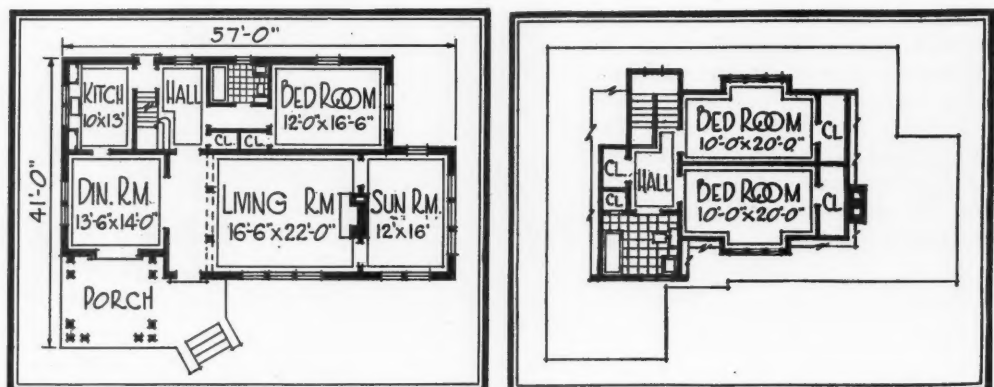
The porch at the rear of this Cape Cod cottage is fully as attractive as the front. Here, the dormers line up gracefully above the broken roof line and the porch roof extends easily out, facing the lawn. The partially enclosed small porch is a feature. Inside there is a panelled living room with beamed and plastered ceiling. On the first floor, the woodwork is stained but on the second, painted.

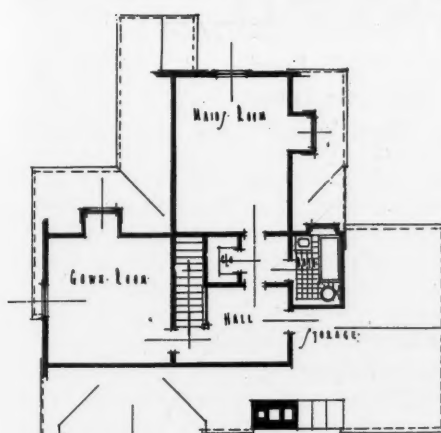




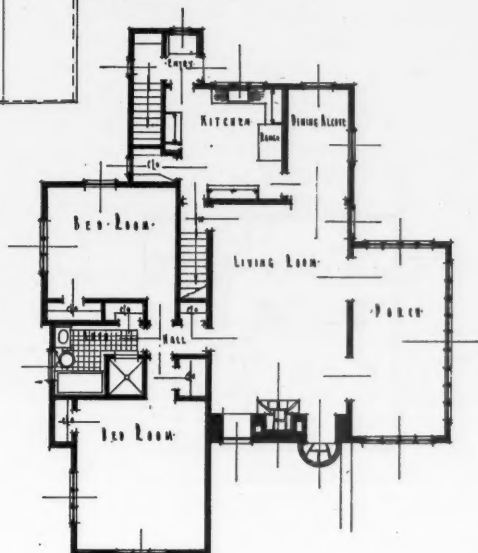
Broad and Low Like a Bungalow

The splendid use of simple materials with the introduction of a few decorative details makes this a distinctive building of the bungalow type in which two fine bedrooms and bath have been provided on the second floor. The covered porch supported on square posts would be a desirable feature for many home owners. Plain walls of brick and the roof of wood shingles are relieved by the half-timbering and stucco in the gable of the entrance and the window treatment of the front elevation. These groups of large windows make the interior bright and cheery. The stairs to the second floor rise from the rear of the hall leaving the living-room undisturbed by this element. Another nice feature of the first floor plan is the bedroom and bath opening from the rear hall, and which would serve as guest room, maid's room, isolation room in case of illness, or as circumstances and family needs required.





This window detail has won widespread attention. Here the designer has cleverly combined steel and wood in an exceedingly artistic manner.



Floor Plans

"Seven Gables"

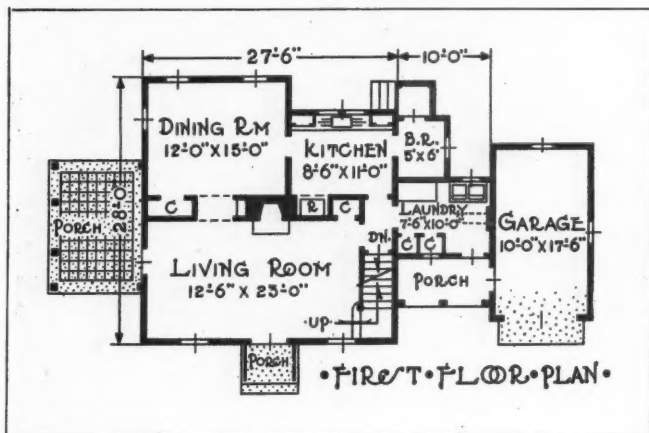
Residence of
MABEL BROWNELL
Douglaston, Long Island

OTTO PREISS
Architect

The entrance through the chimney is unique. The window treatment is interesting as is also the handling of the roof lines. Stucco is the ideal material for this home.



Universal in Its Appeal

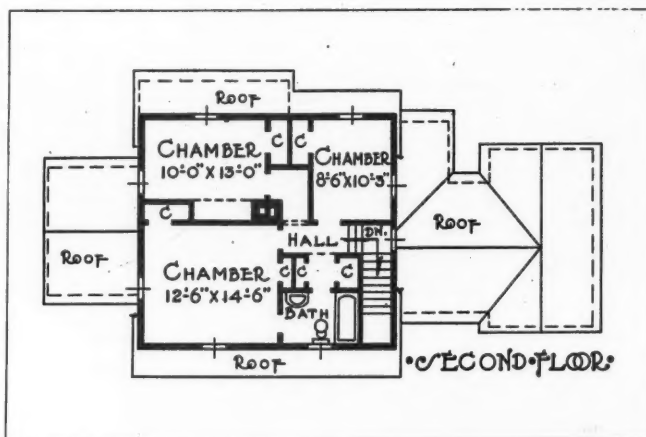


DUTCH COLONIAL COTTAGE

Kenilworth Road
Mountain Lakes
New Jersey

THE BELHALL COMPANY
Builder

Everywhere the Dutch Colonial cottage is admired but not often is the traditional style followed so faithfully and so attractively as in this stone-faced residence. The open porch on one side and the laundry and garage on the other aid in keeping the house snug to the ground. There is a surprising lot of room in this home, revealed by the floor plans shown here.



Trends In Building Activity

By E. L. GILBERT

Research Director, American Builder and Building Age

ALTHOUGH statistical data alone does not constitute sufficient justification for reliable forecasts, carefully compiled figures of the building industry oftentimes present the only material evidence of some important national trend in building activity. Thus, a careful study of the building permit records of a representative group of cities may readily show a loss or gain in popularity for certain types of construction; in such manner it is sometimes possible to determine whether the general public is more (or less) favorably inclined toward 1-family, 2-family, or multi-family dwellings. Indications of this nature are decidedly important to building field economists, students, merchandisers of building products, and the men in the field; without proper allowance for the influence which such trends may have on building activity no national forecast can be expected to be accurate, nor can local building field interests properly estimate the building needs of their communities.

Department of Labor Figures Helpful

The August, 1931, issue of the "*Monthly Labor Review*" presented some statistical findings which should be of value to every person interested in the building business. For a number of years the Department of Labor has gathered figures showing building permit totals for a constantly increasing number of cities; for the first time these figures have been released in such form that they show comparative values for a period of ten consecutive years in 257 identical cities. Since this data covers the most recent decade (1921 to 1930) its value is evident.

General Condition of Building Business Shown

Building activity normally follows population, insofar as geographical distribution is concerned; consequently the conditions which apply in these 257 identical cities may well be considered as indicative of the condition of the entire building industry.

Using expenditures of the year 1921 to establish a basic index number, the ensuing nine years show the following values:

1922.....	58.2%	greater than 1921
1923.....	95.3%	" " "
1924.....	103.9%	" " "
1925.....	141.9%	" " "
1926.....	126.1%	" " "
1927.....	99.5%	" " "
1928.....	90.4%	" " "
1929.....	64.0%	" " "
1930.....	7.8%	less than 1921

The above figures refer to dollar volume of construction reported, all types of residential building but no non-residential being included.

It must be remembered that during this ten year period a number of trends operated to modify or change the apparently exact picture presented by the above figures. In 1921 the average cost reported for new 1-family dwellings in these 257 identical cities was \$3,972 per dwelling; for the year 1930 the average cost figure was given as \$4,993. In other words, about twenty-five per cent more money was spent in 1930 for each 1-family dwelling than was the case in the year 1921.

In 2-family dwellings it is revealed that the peak year in expenditure per job was 1926 when this type of structure showed an average cost approximately 19 per cent higher than for the year 1921; the 1930 reports on 2-family dwellings show that the average cost for that year was only 4.3 per cent higher than during 1921.

Multi-family dwellings, on the other hand, have varied more widely in cost than either of the other two types of residential construction discussed. "The average per-family cost of the multi-family dwellings for which permits were issued in 1921 was \$4,019," says the "*Monthly Labor Review*." "It fell slightly in 1922, rose for each of the years 1923 and 1924, fell again in 1925 and 1926, slightly increased in 1927, fell slightly in 1928, and rose sharply in 1929. During 1930 the average per-family cost of the multi-family dwellings in these cities was \$3,857—the lowest shown for any of the 10 years under discussion."

1-Family Dwellings Stable Factor

It is to be noted that whereas 1-family dwelling construction did not increase (over the 1921 figures) to the same extent, for instance, that multi-family building increased year by year, the 1-family dwelling construction has not fallen off nearly as much during the first six months of 1931 as has been the case with both 2-family and multi-family building volume, compared with the 1921 index figure. It is evident that as multi-family construction grew rapidly in popularity from 1921 through 1928, the attention of manufacturers and builders was drawn to this type of building work; but when apartment activity declined during 1929, and fell off even farther during 1930, a condition of keen competition was established—with the result that to obtain sales in this division of the market manufacturers of many different types of products found themselves rapidly entering a period characterized by "price wars".

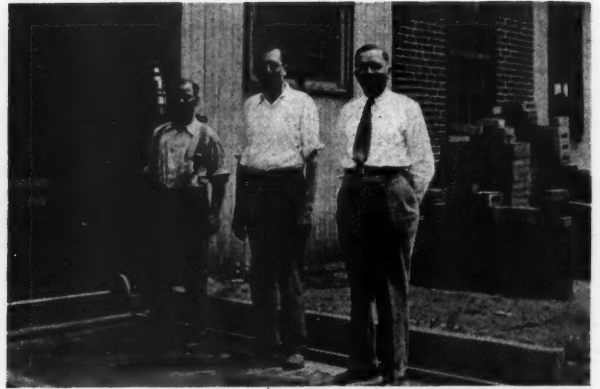
Whenever price becomes the most important factor in building activity, quality of both workmanship and materials is bound to suffer. Consequently, it may safely be assumed that the low prices of building products, current during the first six months of 1931, represent a purely temporary condition. Manufacturers cannot continue the production of building products at a loss, nor will contractors, builders and material men continue operations indefinitely on a no profit basis.

Public Turning Again to Private Homes

In the year 1921, according to the Department of Labor, 24.4 per cent of all the families provided for by new construction in these 257 identical cities were housed in multi-family dwellings; 1928 was the peak year, when 53.7 per cent of all the "home units" constructed that year were in multi-family structures. Contrast the growth in popularity of the multi-family type of housing during these ten years with 1-family and 2-family building and it is easy to see that although apartment building flourished strongly for some years, with a consequent lessening of activity in the two other types of housing, the fluctuation in 1-family building does not correspond to the fluctuations in multi-family

(Continued to page 100)

From House Building to Brick Making



J. H. Trudeau, President of the Dunn Building Products Company of Vineland, N. J., Stands at the Door of the Plant He Established in May. On his left is Arthur J. Morin, his sales manager, who has secured orders for thousands of brick, and on his right, Edward Del Duca, superintendent.

—a Successful Step for a New Jersey Man Who Saw the Possibilities

J. H. TRUDEAU of Bridgeton, New Jersey, used to build houses, specializing in masonry construction. Some time ago, in his copy of *AMERICAN BUILDER AND BUILDING AGE*, he saw mention of a machine for making cement brick. He made inquiries and investigated the market for face and backing-up brick in his section, with the result that, a little more than two months ago, he opened a plant for the manufacture of brick and tile in the town of Vineland, New Jersey, close by his home town of Bridgeton. He has had unusual success, orders coming in so fast at the start that it has been hard for him to make the plant expansions he has planned, so busy has he been with production.

In success stories, the business man is usually pictured as having a hard time of it before he finally achieves success. But apparently Mr. Trudeau, of the Dunn Building Products Company of Vineland, New Jersey, is an exception to this rule. Unless he is keeping something to himself, he has not experienced great difficulty nor encountered huge obstacles in getting into the brick business.

After investigating the possibilities of the brick-making machine he planned to utilize, he began a search for a suitable plant in his locality. As luck would have it, he found an old brick plant in the nearby town of Vineland, in good condition, and containing three

good-sized kilns. At a bargain price, he bought the plant and two and one-half acres of ground with it and immediately began to make necessary alterations.

The brick machine itself was bedded on the first floor directly opposite the kiln openings. Space was left by its side for a tile-making machine soon to be installed. Track was laid for running the brick cars into the kilns and then out into the yard for storage. The boiler room and steam kilns were repaired; raw materials, in the form of cement, slag and sand were brought in, and manufacture started in the early part of May, this year.

"When I began I did not have an order," says Mr. Trudeau. "I remodeled the old plant and set the machine up myself out of the parts sent from the factory. A day or two spent with the factory expert showed me how to run it, then I was ready for business. The first order was not long in coming. It was for 42,000 backing-up brick for the new Dupont office building in Gibbstown, New Jersey. This order was hardly on its

Through the Doors at One End of the Plant, Raw Materials Are Taken In, Then Hoisted to the Mixer in the Pent-House. At the other end of the plant, three kilns receive the brick for curing after they have passed through the brick machine. The yard will later be used for storing brick and tile, but up to now all has been immediately sold.



way before I received an order for brick to be used in the construction of an apartment house in Atlantic City. They wanted these brick immediately and not wishing to give them green, uncured brick, I turned this order down. But other orders from other places followed right on its heels and since then we haven't had time even to get fully organized."

The success of the Dunn Building Products Company of Vineland in lining up so much business in the short space of eight weeks is due, not only to the foresight of Mr. Trudeau in correctly gauging the possibilities of his territory, but also to his good fortune in securing the services of one of the best material salesmen in that section, Arthur J. Morin, formerly with the Walter E. Turner Co., one of the best known lumber and building material firms in that region.

As sales manager of the new brick company, Mr. Morin has made a phenomenal record, having already secured orders for many thousands of brick and opening up leads for the sale of many thousands more. With a long background of success and service in the building material business in that section, he possesses the respect and confidence of builders, architects and dealers and the new company is meeting with 100% co-operation from all elements of the industry. Two local dealers alone account for approximately 50,000 brick a year each and local residential construction is chiefly masonry. Mr. Trudeau's plant, of course, is ready to

furnish brick for all types of construction. Their present schedule calls for 34,000, 12", mat-glazed brick for an apartment house; 250,000 back-up brick for a state institution in Pennsylvania; 50,000 brick for a dormitory in a nearby state institution. A large hotel in Philadelphia should bring them much additional business and a boy's training school in the same town has resulted in another order for back-up brick.

"Builders and architects like our brick," said Mr. Trudeau. "The slag brick which we make are firm and square, and when used for backing-up, make a nice, neat job. We have many orders for this type of brick but a number of inquiries have also come in for colored and face brick. We expect to turn out quantities of these in a short while. As soon as our tile machine arrives we shall also begin to make roof tile in colors.

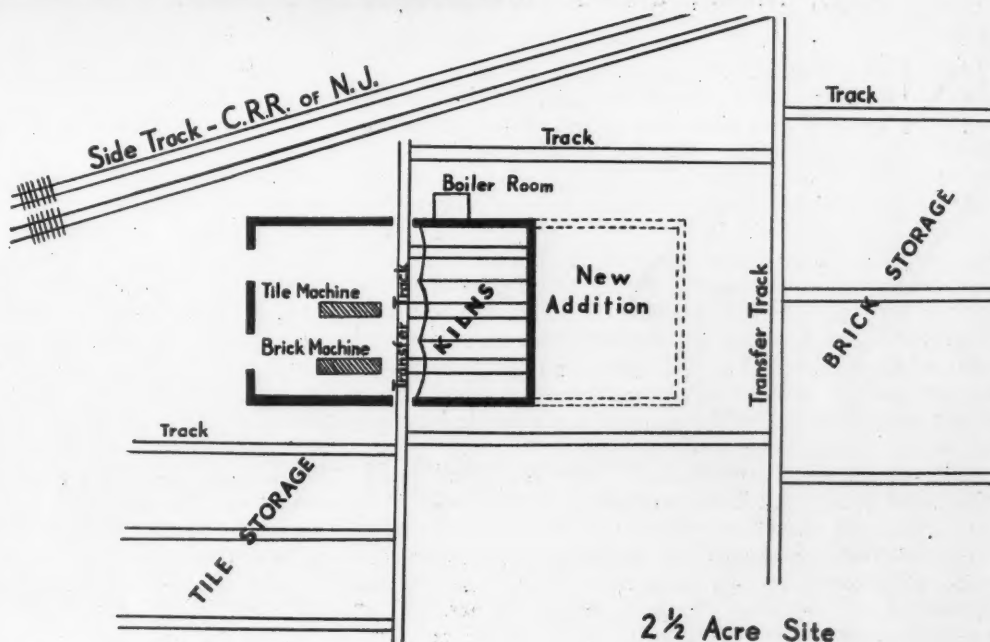
"Our production, at maximum, is about 24,000 cement brick per eight-hour day—about 56 per minute. Our slag is obtained from a slag concern in Pennsylvania. Labor is not high-priced in this locality, and costs of production are low. We are able to deliver gray, slag brick on the job at \$2 less per thousand than competing brick."

Mr. Trudeau intends to expand his plant immediately, building an addition to one end in order to enlarge the kilns and also to provide a room for coloring and glazing work. Tracks will run out of the plant and into the storage yards on the sides, where the brick and tile will be stored. The drawing which accompanies this article gives a rough idea of the layout.

When his tile machine arrives and Mr. Trudeau reaches full production, his plant will employ six men. Mr. Morin, the sales manager, sees a big, potential market for their brick and tile in that section in residential, apartment, commercial, industrial and institutional construction.



Slag, Sand, Cement and Other Raw Materials Are Received Through One End of the Plant, Are Shoveled Into a Bucket Conveyor Which Takes Them to a Mixing Machine Overhead. After being mixed, the material drops down through a chute by gravity and into the brick molds of the machine where it is tamped and troweled into the form of bricks. These are taken off the machine and put on racks which are trundled into the kilns shown in the drawing to the right. The new addition will soon be built to house coloring and glazing work.





Good Money Making Novelties

Handy with Tools and a Lover of Wood, C. C. Field of Deer Lodge, Mont., Shows How Profits Are Made

By LEE EHRET

"NEXT stop, Deer Lodge!"
The giant Northern Pacific locomotive ground to a slow stop alongside an almost deserted Montana station. Nestled in the heart of the Rockies, Deer Lodge has a population close to 5,000. Only two passengers alighted and I—one of them—immediately spied "C. C." in his small truck parked alongside the curb. As we drove along to his home and shop, I plied him with questions. "C. C." is a young man in the thirties with a wife and two fine children. He is broad shouldered and bronzed by the western sun. His full name is C. C. Field. He had been a railroad telegraph operator with a hobby for making things of wood. How he has developed his hobby to start a profitable business of his own is the subject of this story.

Like many woodworkers, C. C. Field started in his spare time in a small home workshop—using only hand tools. His real success started from the day he installed a combination woodworking machine which combines seven actual units in one: saw table with cross cut and rip saw, lathe, mortiser, shaper, sander, jointer, and an ingenious band saw which folds over out of the way.

"How did you happen to buy this particular machine?" I asked C. C.

"I corresponded with almost every woodworking machine company in the United States for a period of a year and a half," he answered. "After sifting them all down, I decided on this electric carpenter. It has no bad features. A carpenter or woodworker really can't get along without a power machine such as this, if he wishes to compete in this day and age."

C. C. calls himself a cabinet maker. He specializes in red cedar products—lamps, novelty cedar chests, smokers' supplies, card players' novelties, inlaid cribbage boards, gun cabinets, humidors, and many other novelties and practical articles for home use.

"I also do quite a bit of screen work and storm sash," explained C. C. "I just finished a very nice two section bookcase, top and base for a local church. This had to be built to order and could not be purchased from manufacturers."

Thanks to his tourist business (one customer telling another) C. C. Field's lamps are now scattered in all sections of the country from Seattle to New York. The

photo below shows some of his workshop products displayed for tourist trade. Gun cabinets are built to order from his own designs.

When I asked him why he specializes in red cedar products, C. C. waxed enthusiastic: "Because it is the enduring wood of the ages and takes a handsome finish. It is a fragrant wood of exceptional durability." Then I learned the interesting story of western red cedar:

From the earliest times in all lands, cedar has been the favored wood for general use. Indians used it for centuries for their tribal totem poles, for their huge war canoes and as split shakes to build their lodges. When the white man first reached the great Northwest, he felled giant cedar trees and hewed logs for his humble cabins. Western red cedar trees measuring 16 to 20 feet in diameter have been found, but average old growth cedar usually measures from 3 to 8 feet in diameter. This species attains a great age—some specimens over 1,000 years old having been found.

"I log my cedar out of the hills myself," C. C. went on. "But it grows in the most inaccessible places. Sometimes I am compelled to use 200 feet of cable over cliffs with block and tackle to get it out. But it's worth it! The Idaho and Washington cedar are nothing compared to this material here."

It is interesting to note that the cost of Mr. Field's entire workshop equipment, including his electric carpenter, small tools, supplies, lumber, etc., totals only \$750.00. (A recent magazine survey among 60,000 workshops like C. C.'s showed that the average cost of equipment was \$438.00. In most cases this represented a variety of different machines like mortisers, lathes, band saws, etc., scattered all over the shop. With an all-purpose woodworker like C. C. Field's, however, the complete workshop is combined in one machine costing less than the average above quoted and occupying only 4 by 6 feet of floor space.

"How do you get the ideas for those things you make?" I asked. "Some from magazine articles," C. C. answered, "but most of them I originated myself. It's easy to get plans to make hundreds of things. The people I bought my new woodworker from have a list of '500 Things to Make of Wood,' and will put anyone



C. C. Field, Cabinet Maker
Deer Lodge, Montana

in touch with publishers who supply blueprints and instructions for making these things. The most desirable things to make, however, are original salable articles which can be made and sold in large quantities."

When I left Deer Lodge that night, I carried with me a beautifully inlaid cribbage board. (C. C. showed me enough of the game to enable him to beat me three straight games.) I also carried with me a respect for the determination and courage that is starting hundreds of men like C. C. in a profitable business of their own. It takes real will power to break away from the beaten path and go into a totally new business but the success of thousands like C. C. Field has proven that it can be done.



Some of C. C. Field's Beautiful Red Cedar Products Displayed for Tourist Trade. Photo opposite shows C. C. in his Montana Workshop, using the band saw of his woodworker to cut an intricate design in a 4 inch block of Western Red Cedar.

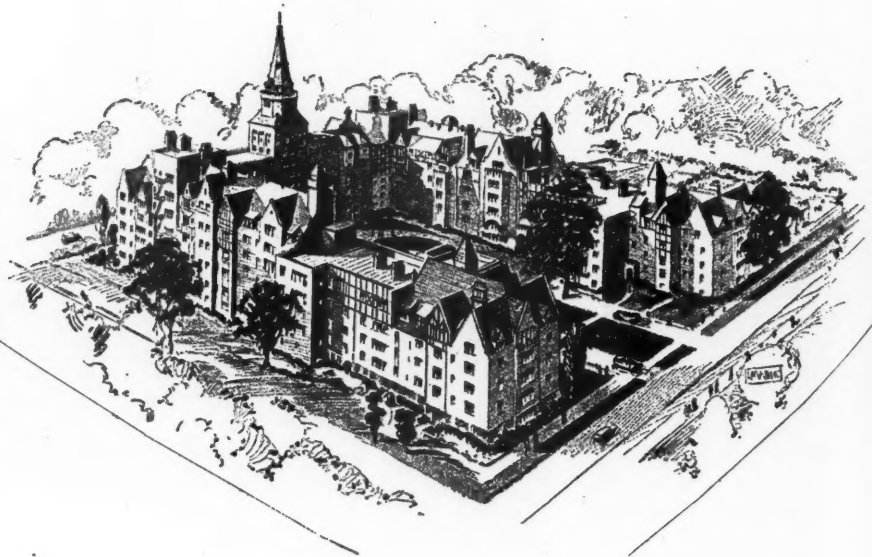


BEAUTY in Apartment Design

BLIND BROOK LODGE • RYE • New York

VAN WART & WEIN • Architects

STINSON, BELL & STONE • Builders



THIS apartment was designed for a site in a suburban countryside where the English style of home predominates. Problems of room layout and structural cost were paramount and they were successfully met with a style that presents a happy combination of Norman and French elements. Throughout the designing period, costs were carefully considered and the result is a distinctive apartment building, well adapted to its suburban location, in which costs have been kept down by clever planning.

CONSTRUCTION DATA AND SPECIAL FEATURES

Name of Apartment: Blind Brook Lodge.

Location: Rye, N. Y.

Total number of apartments: 122

Total number of apartments per floor 26

Number of rooms per apartment:

3 1/2, 4 1/2, 5 1/2, 6.

Total number of rooms: 463

Apportionment of apartments throughout building:

3 1/2's 60

4 1/2's 36

5's 14

6's 8

12 guest rooms

4 tower rooms

3 rooms in waiting office

2 rooms in doctor's office

Average area of living rooms: 308 sq. ft.

Average area of chambers: 180 sq. ft.

Average area of kitchens: (including dining alcoves): 128 sq. ft.

Total number of stores: Business occupancy of building limited to restaurant on ground floor.

Elevators: (number) 10 (type) push button

Ground Coverage: 40%

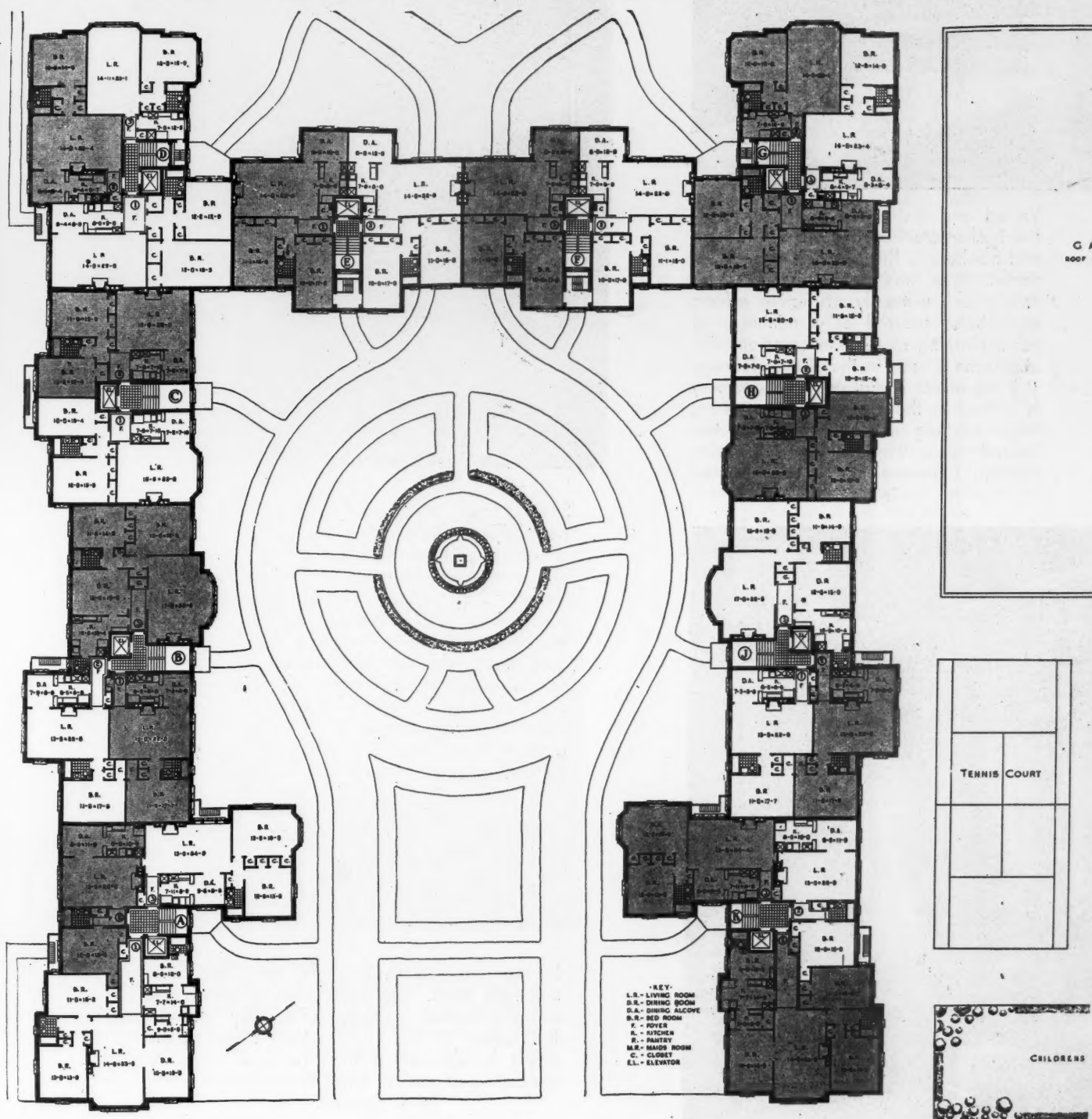
Average area per room of building area: 250 sq. ft.

Average area per room of lot area: 260 sq. ft.

Height of ceilings: 8 ft. 0 inches.

*(Dining alcove designated as 1/2 room)

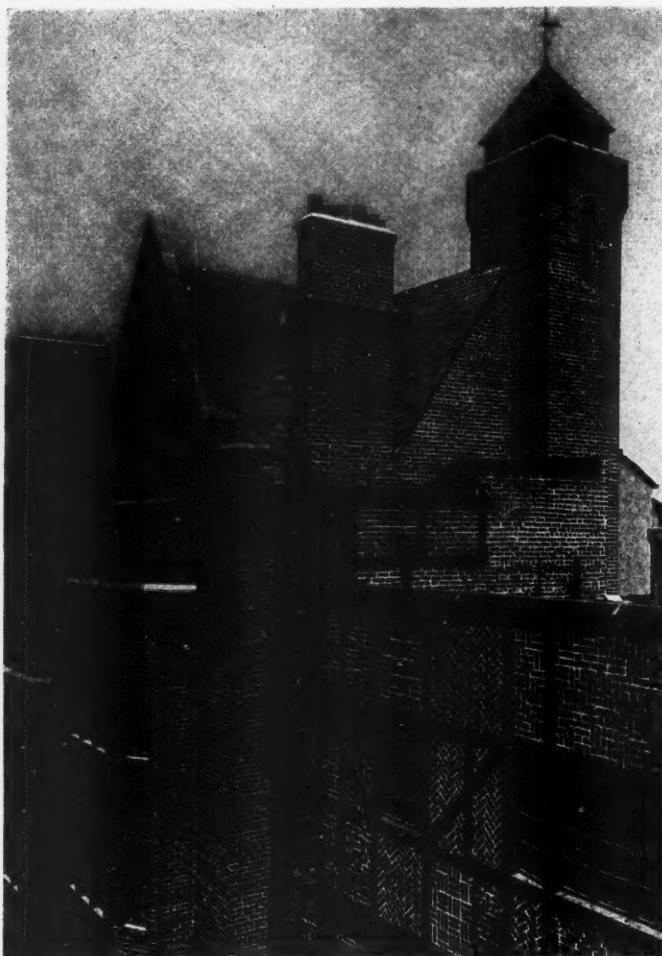
TYPICAL FLOOR PLAN - BLIND BROOK LODGE



BEAUTY IS BUILDED C



Varied and distinctive entrance treatment characterizes Blind Brook Lodge and nowhere is the skill of the designer shown more than in the entrance details where unusually attractive effects have been secured at a minimum of cost. Nothing more than common brick and stone is used in the above doorway yet the effect is striking. The doorway is arched in the Gothic manner and a brick molding above ties in the two leaded glass windows in a pleasing fashion. Common running bond is used in the main wall brickwork.



Sloping roofs, towers and bulkheads not only fit in perfectly as design elements but serve to house structural and mechanical parts of the building. The weathervaned tower at the right conceals an elevator shaft. The economical and careful use of the sloping roofs, covered with Vermont slate, is an example of clever designing with an eye to the cost sheet. The bay in the lower left corner not only is effective in helping to vary the exterior design but makes an extremely attractive interior element. Another successful variation in design has been achieved by the nogging shown in this illustration, done in herringbone and basket patterns.



In the entrance to the left, the Tudor element manifests itself. The Tudor arch is surmounted by a battlemented balcony, effectively interpreting the feeling of the Tudor style. Here again, the effect is achieved without recourse to expensive decorative elements. Note the height to which the stone foundation is run.

THE ISSUE OF SEPTEMBER, 1931

D OUT OF THE BRICK

AT BLIND BROOK LODGE

The possibilities of brick in apartment design are becoming better known to American apartment builders and our work is beginning to compare favorably with European craftsmanship. Brick lends itself particularly well to apartment designs of the style illustrated here. With common brick, well handled, striking effects can be secured. Blind Brook Lodge at Rye, New York offers one of the best examples of how exterior design can be set off with carefully planned and restrained details in brick and stone. When skillfully designed, such details do not appear as ornamentation but truly seem an actual and unified part of the design. Attractive appearance thus becomes an indispensable part of rental economy.



An example of successfully combining a design element with a functional requirement is shown in the above illustration. The upper tower houses a tank and a smoke stack, while the lower portion contains a fire escape, opened up by means of the longer and narrower openings down the center. The lower tower contains guest rooms for the convenience of tenants with visitors.



The entrance into the interior court has been arched with cast stone and accented with a parapetted balcony overhead. The longer, narrower openings for the concealed fire escape can be seen in the center of the tower wall on the left. Below, a corbelled treatment of the protruding bay, together with random stone and brick work on the sides, forms a pleasing entrance to the apartment restaurant. This entrance has received treatment distinct from the others yet note how well it conforms to the spirit of the style.



BLIND BROOK LODGE

TWO APARTMENT INTERIORS

Structural elements in apartment interiors often present real problems to the conscientious designer. Here are two different rooms by the designer of Blind Brook Lodge, both of them conforming to structural necessities, both offering interesting studies, the lower one adhering to the Norman tradition. In rooms like these, tenants find enjoyment in arranging their furnishings in their own interpretative and decorative way. The necessity of keeping costs down to the minimum in apartment construction often holds the designer back on his interior work. Below are given the general specifications followed at Blind Brook Lodge.

This high-ceilinged living room in Blind Brook Lodge presents interesting features. The floor is of random width planking. Hewn ceiling beams appear in that portion underneath the overhead balcony. A low arch leads into the dining room beyond. Below is shown an effective wall and fireplace treatment, lending an atmosphere of spaciousness and magnificence to the room. The fireplace opening is high and wide with the breast running up to the ceiling.

GENERAL OUTLINE SPECIFICATIONS

BLIND BROOK LODGE, RYE, N.Y.

- FOUNDATION:** Footings, poured concrete. Foundation walls, rubble stone.
- FRAMING:** First tier, structural steel. Upper tiers, wood beams.
- EXTERIOR WALLS:** 12" brick, faced with selected common brick, with oak half timber, and stucco and stone trimmings.
- ROOFING:** Sloping roofs of slate. Deck roofs of tarred felt.
- LEADERS:** Copper.
- FLOORING:** Double floors. Rough flooring, $\frac{7}{8}$ " N. C. pine. Finished flooring, selected strip oak. Resin between floors.
- INTERIOR FINISH:** Walls and ceilings, three coats, plastered on wood lath. In halls, cement plaster, sand finish.
- PLUMBING:** Hot water line pipes and circulating pipes, all brass. Cold water supply pipes, galvanized wrought iron.
- HEATING:** Two pipe, low pressure, vacuum steam heat; cast iron radiators.
- CLOSETS:** Ample closets with shelving, clothes rods, etc.
- KITCHENS:** Gas ranges, electrical refrigeration, sink and laundry tray, linoleum floors and built-in cabinets.
- BATHROOMS:** Tiled wainscots with ceramic tile floors. White, standard fixtures and recessed medicine cabinets. Built-in, recessed tile accessories.
- ELECTRIC FIXTURES:** Of varying designs in brass, ample switches of toggle type. All wire in rigid conduit and installation approved by the National Board of Fire Underwriters.



The House of the Month

Seven-Room Colonial House Designed by D. Wentworth Wright, Architect, and Built in One of the New York City Suburbs, Presented in Eighth-Inch Scale Drawings

A WHITE Colonial home with green shutters seems to many the very acme of hominess. There is an air of thriftiness about such a home—nothing superfluous, nothing to run down and get out of order, compact, easy to heat, and easy to live in, which appeals to buyers and builders alike. The example shown in the photograph above and in the working drawings on the four pages following, preserves the Colonial conventions with exactitude, yet in an ingenious way adapts them to the needs of a dwelling of small size.

The entrance is moved to the left of the center line so that this house does not have the exact balanced symmetry which is usually associated with the Colonial. However, the addition of the one-story enclosed porch re-establishes a dynamic symmetry which is altogether pleasing. Inside, this arrangement permits the living room to be placed the long way of the house across the front to the right. Back of it is the dining room in the approved L-form.

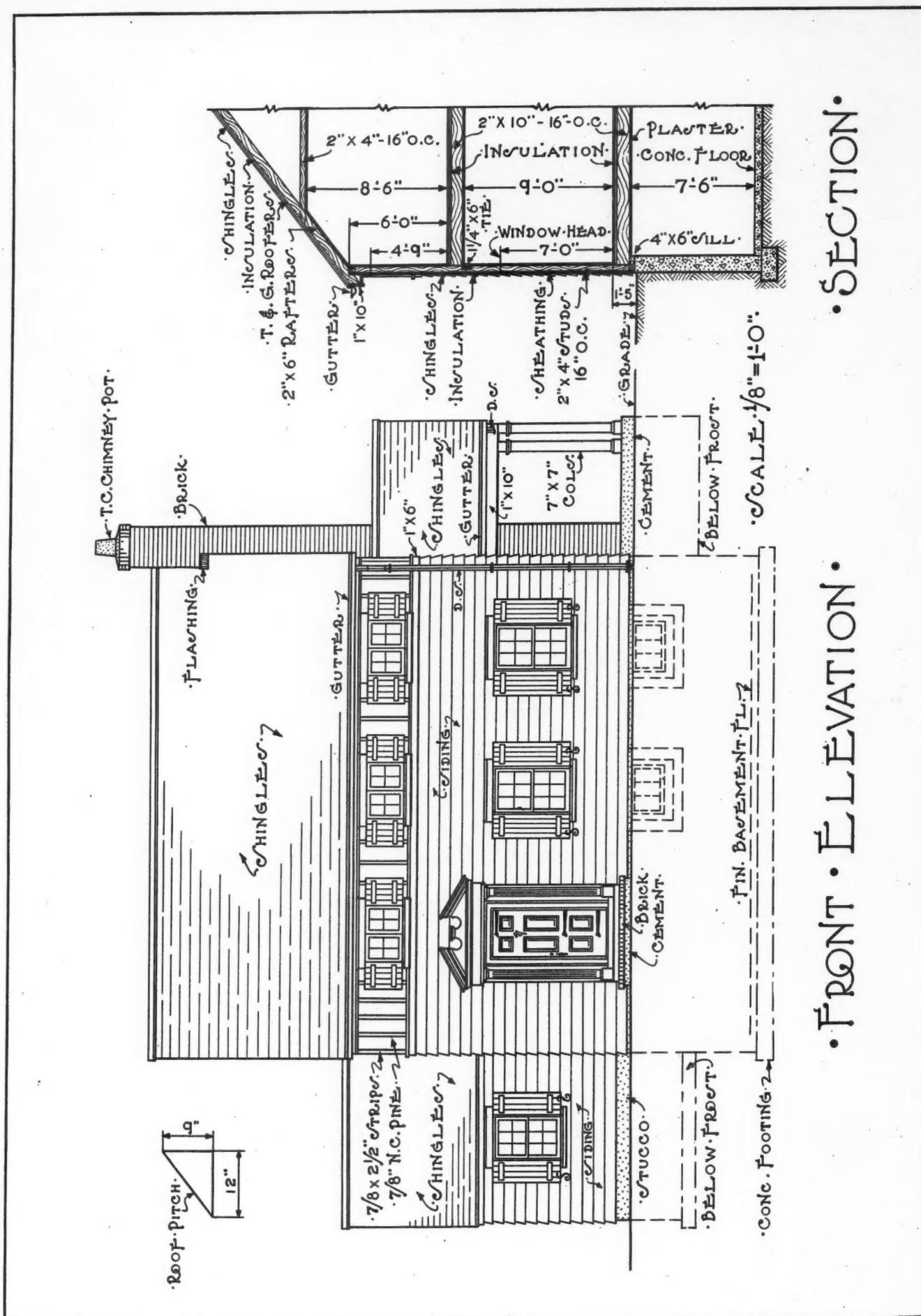
In a small house such as this, thirty-nine feet and a half across the front, the regular Colonial arrangement with the entrance and stair hall in the center, and living room across one end, and the dining room and kitchen

across the other, would result in rooms entirely too small to be practical. This arrangement, on the other hand, results in rooms of good size without any feeling of crowding. The addition to the left of the reception hall, designated as an enclosed porch, would really make a delightful library or office study, in addition to being a well-lighted solarium.

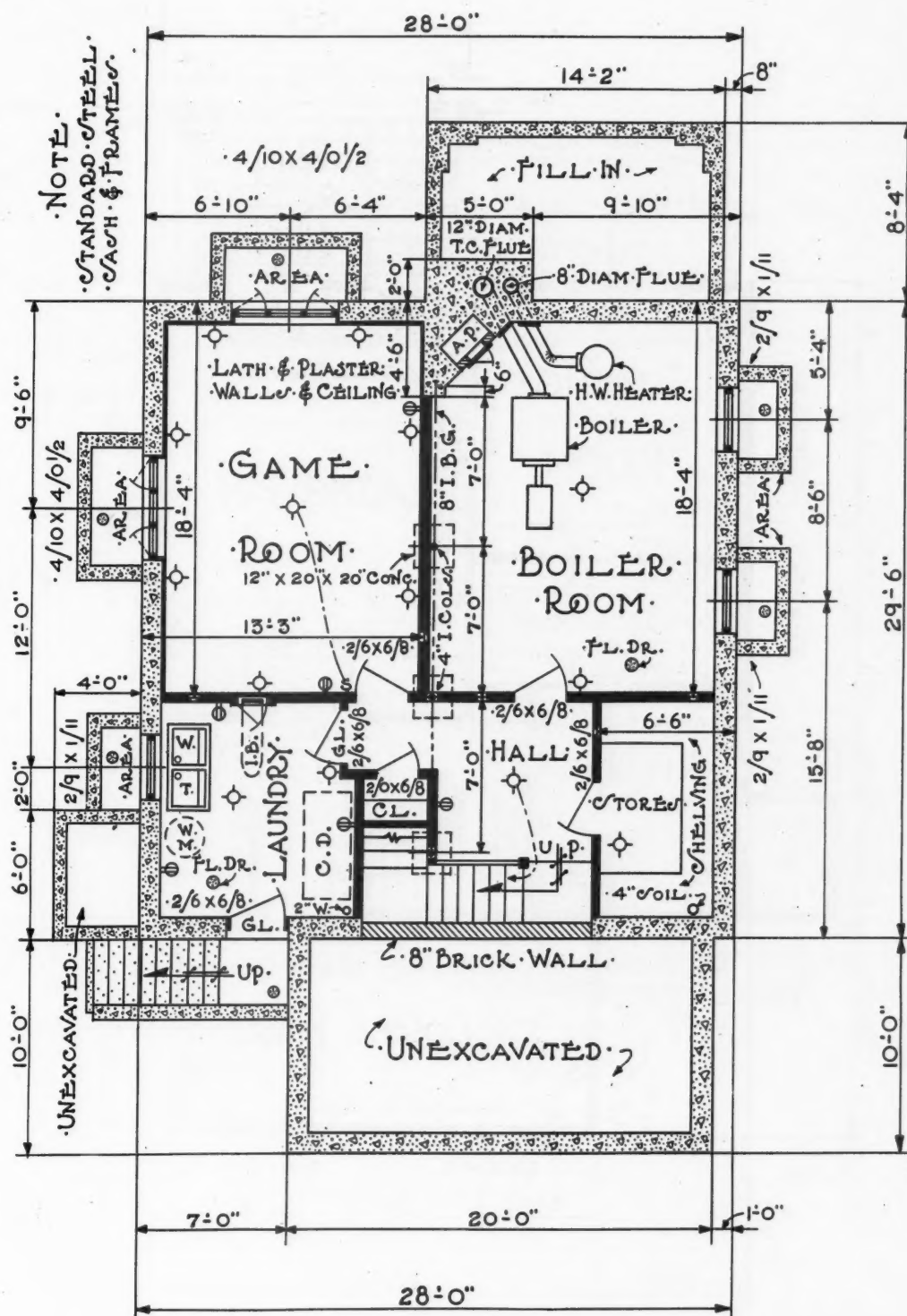
The second floor of this design works out very well with three corner bedrooms, one of them extra large. There is generous provision of clothes closets, and the bathroom space is not skimmed.

Down below in the basement, there is likewise economy of space and cleverness of arrangement. The use of gas or oil for fuel releases to other uses the space ordinarily assigned to the fuel bin. Also, the absence of dirt and dust makes it practical to use the basement space for game room, laundry and storage. A very desirable feature, and one which should more frequently be incorporated in small house plans, is the outside laundry and basement entrance. It is a great mistake to fail to provide an easy exit from the laundry and from the heater room especially where coal is burned, and ashes have to be removed. A properly arranged outside cellarway is worth much more than it costs.

WORKING DRAWINGS OF THIS HOME ON THE NEXT FOUR PAGES



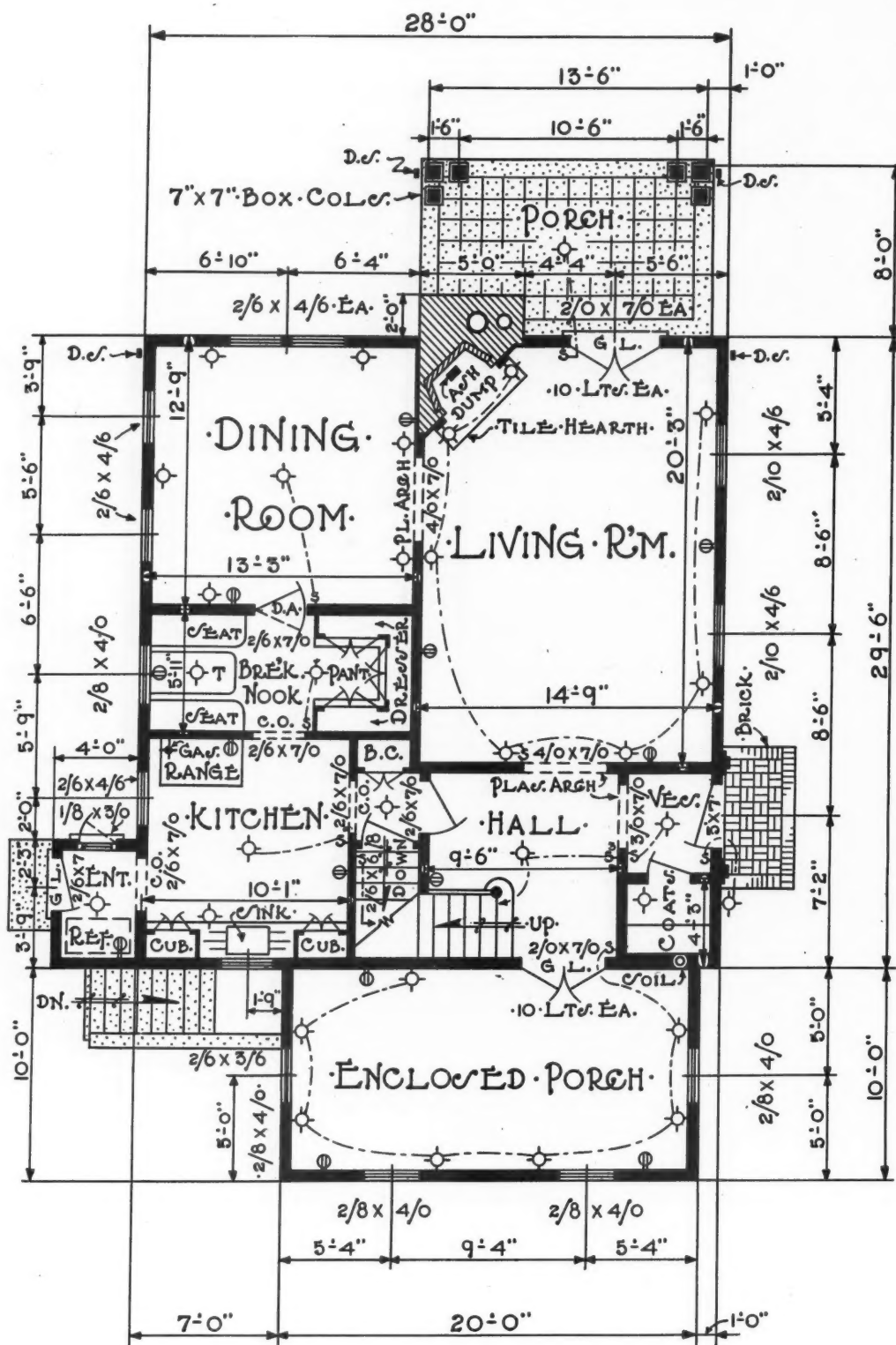
The Elevations of the September House of the Month Show the Restraint and Simplicity Which Should Always Characterize the Colonial.



• BASEMENT • PLAN •

• SCALE • $\frac{1}{8}" = 1'-0"$ •

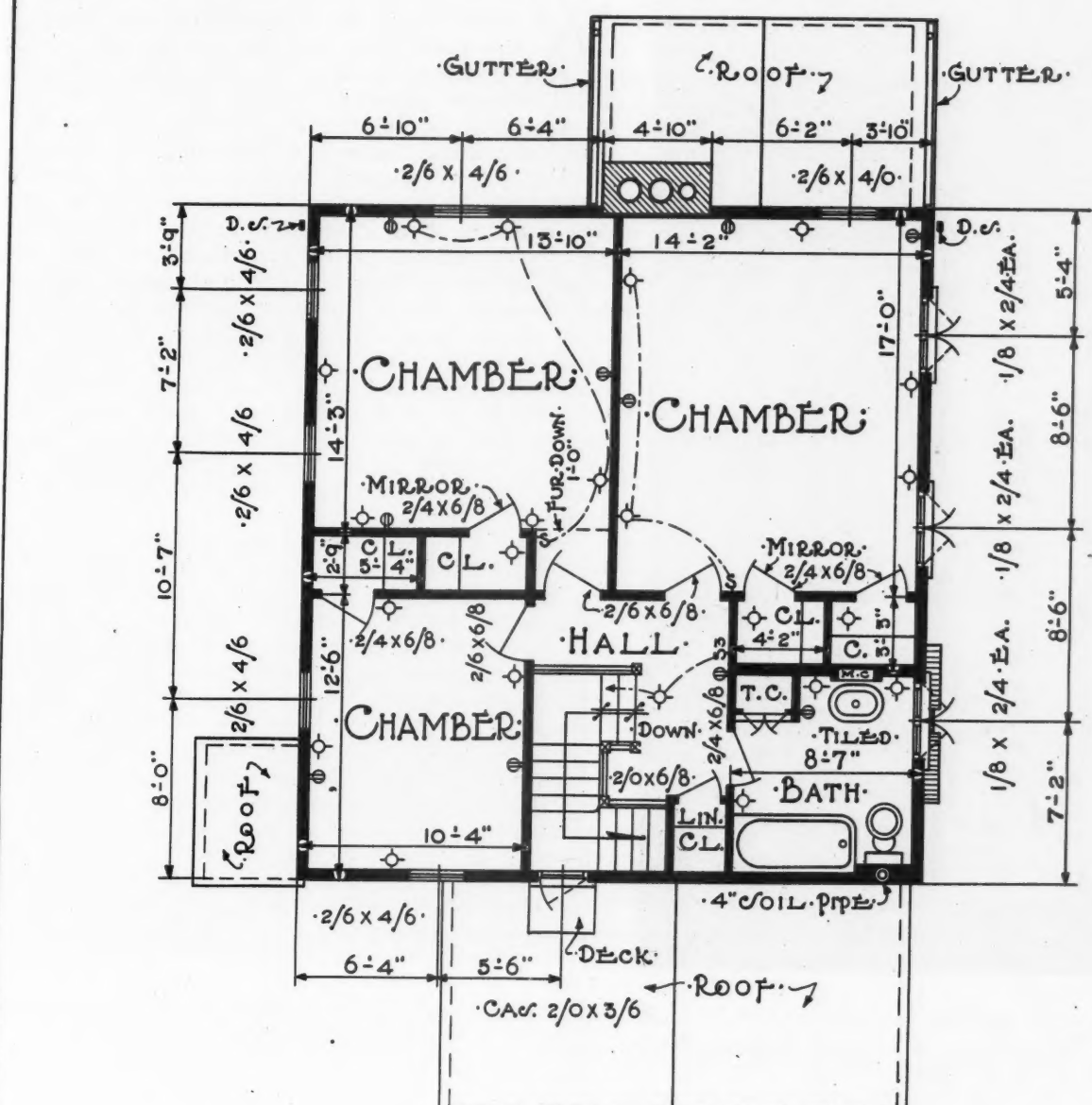
A Basement Arrangement That Makes the Most of a Space 28 by 29½ Feet. Oil or gas heat requires no storage space and the entire basement is kept clean.



• FIRST FLOOR PLAN •

• SCALE • 1/8" = 1'-0".

The Room Arrangement in the September House of the Month Varies from the Colonial Convention by Placing the Entrance and Stair Hall to One Side of the Center Line.



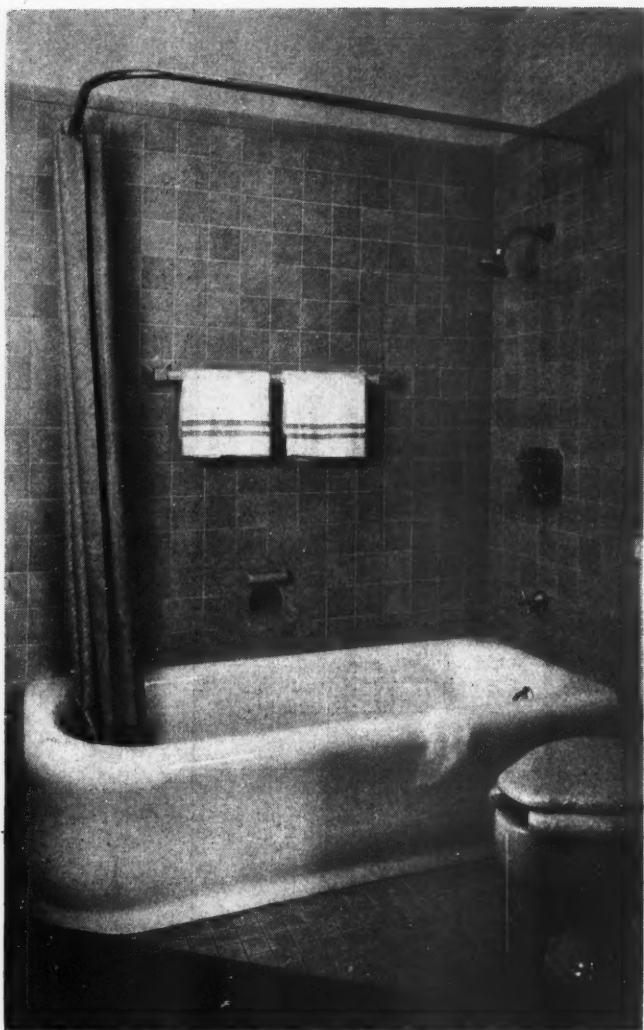
• SECOND • FLOOR • PLAN •

• SCALE • $\frac{1}{8}" = 1'-0"$ •

Three Pleasant Bedrooms, One of Them Extra Large in Size, Plenty of Closets and Well Placed Bath Room Complete the Second Floor of This Interesting Home.

Try These Latest Ideas for

BATHROOM MODERNIZING



Walls and Floors of Blue Tile Serve to Set Off This Built-in Bath and This Syphon Jet Closet, Both in White, Equipped with Chromium-Plated Fittings. These two fixtures together with an up-to-date lavatory will fit easily into almost any bathroom that is being modernized.

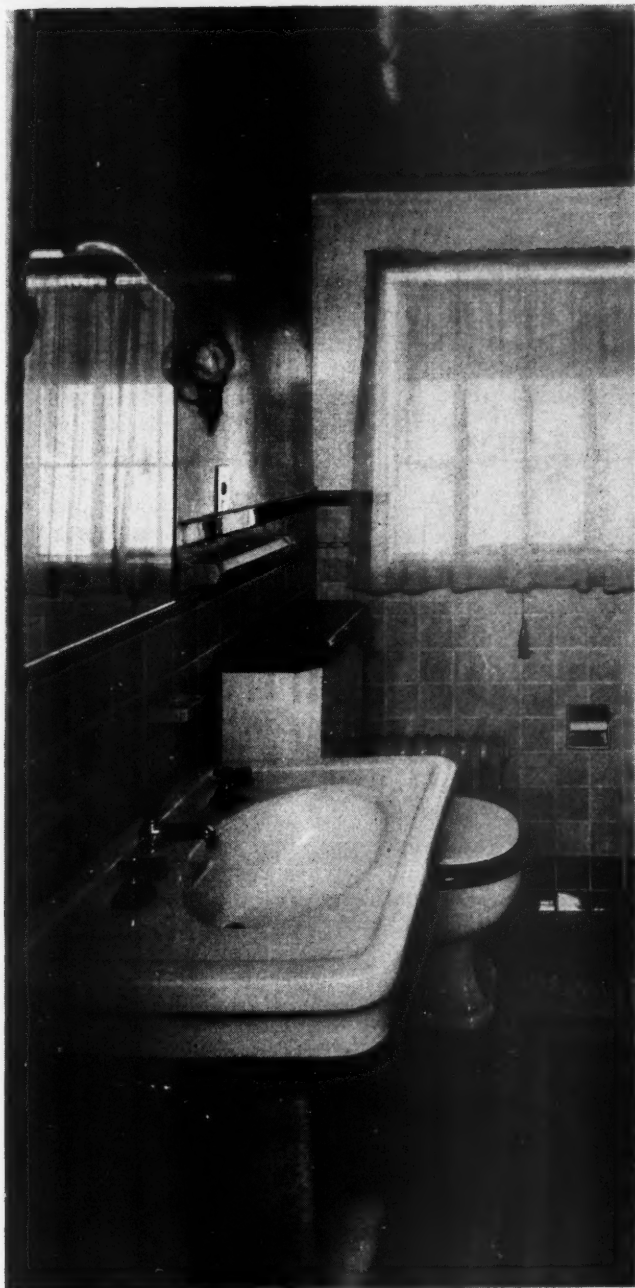
A Built-in Bath, Wall Pattern, and a Vitreous China Pedestal Lavatory, Both in Horizon Blue and Equipped with Round Chromium-Plated Fittings Create an Atmosphere of Comfort and Cleanliness in This Installation.

WHEN the master plumber tells us his customers are asking for colored fixtures in bathroom and kitchen we sense the fact that the newest phase of the color movement has passed the trial stage. When this same plumber considers show window space a necessity in his business we know he has been convinced of the sales value of colored sinks and bathtubs. Once it was a foregone conclusion that all plumbing fixtures should be white and he felt no need for window space to show a standard article. The various pieces only differed in size and shape but white they invariably were. Now all that is changed. The up-to-the-minute plumber is busy decorating whatever show window space his shop affords as a background to display some plumbing fixture. In a window, no matter how small, it catches the interest of the passerby. We know of a plumber who spent many hours recently hunting and arranging a shower curtain to serve as a background for a lovely bathroom window display. That was good sales reasoning and will bring him sales results.

When the landlord tells us that apartments with colored sinks and bathtubs are more easily rented we look knowing and conjure up a mental picture of colorful days begun in a pink-and-white bathroom. In a wink our own white bathroom has become dull and uninteresting. He says his would-be tenants tell him that color makes the rented apartment distinctive and more homelike—more like the home they would have if they could.

When Mrs. Home Owner orders colored tubs for her laundry we have undoubted proof that colored plumbing ware is not a passing fancy. If there is one thing in our experience that seems the very acme of substantial things it is a laundry tub. Once installed it seems as much a part of the house as the cellar itself. In the past decade styles have changed all over the





Colored Tile Effects in Many Combinations Mark the Best of Present Day Bath Rooms.

house from the piano to the kitchen range but somehow we never got around to giving the laundry tub the air. Now the veteran has been given an honorable discharge and a gleaming piece of colored porcelain takes its place to bring cheer to that dreariest day of the week—wash-day.

When hospitals are equipping entire establishments even to patients' and treatment rooms with colored plumbing and toilet fixtures we are told it is because doctors know that color has a definite therapeutic value. Here was a real reformation quietly conducted, for white was always the traditional color for hospitals. It was part and parcel of the hospital like the smell of ether and the stiffness of white uniforms. Not any longer. Nor were the doctors influenced by style trends. That color plays a valuable part in the healing of mental and physical ills has been long recognized. Colored enamel ware, porcelain and china are putting

this new-found fact into actual working operation.

A few days ago we were shown over one of the most modern and beautiful hotels in this country and saw there a barber shop such as our eyes had never before beheld. A shade of green like palest jade was the color of the wash basins in long rows against mirrored walls. Luxurious chairs upholstered in soft green leather, green marble wainscoting, green cork floor and green lighting fixtures added to the beauty and harmony of the room. The towels had green borders and the barbers wore linen coats of harmonizing green. Upon inquiry as to why the radical change from barber-shop-white to this gorgeous use of color we were told that color is restful for tired patrons and that it is just as sanitary as white could be, also that it is good business to keep up with modern decoration.

When we learn from authorities that millions are
(Continued on page 104)



General View of the Remodeled Basement Room with Knotty Hemlock Paneling.

Basement Remodeling for Winter

Attics, Too, Yield Profits to Enterprising Builders

By J. B. FITZGERALD

SPURRED on by the idea that much good and usable basement space in Seattle was going to waste, and that the winter season would be a good time for inside remodeling, J. I. Ripley, a Seattle contractor, demonstrated last winter what could be done. One of his jobs was particularly interesting.

Some practically unused space in a basement in a large home was converted into an attractive room for the three boys of the household by paneling the walls with knotty West Coast hemlock and installing built-in

bunks suggestive of a ship. The boys are tremendously proud of their room and take pains to keep it neat and orderly. It is as warm and comfortable as any other room in the house, and provides a healthful and pleasant place for the boys to study, read and entertain their friends.

Plans for the improvement of this room were prepared by F. M. Smith, designer for the Seattle Home Modernizing Bureau, as part of the bureau's service to Seattle home owners. Twelve-inch hemlock boards

Inside work when the weather is rough outside is the carpenter's and builder's joy! ¶ Canvass your town NOW for remodeling and modernizing jobs that you can put through this winter! ¶ Study the possibilities—work out schemes that will appeal; you will be amazed at how much worthwhile building activity you can CREATE!

—Editor.



Basement Room at the Time Construction Started.

and three-inch battens were used for paneling. A solid Douglas fir door and bunks of the same material complete the sidewalls. The floor is of Douglas fir laid over the old concrete.

This installation illustrates one of the effective uses that may be made of unused space in basements and attics and emphasizes the opportunity for lumber dealers and builders to create sales by interesting home owners in finishing rooms in these parts of the house. Such work is very advantageous at this season of the year.

No part of a house permits such freedom of use as do these often overlooked basement and attic places. The space in unfinished basements and attics has a number of distinctions. The finished rooms of a house usually have a certain set function to perform.

But the attic and basement are different. They may be finished, if need be, to provide additional bedrooms, or to serve as storage space. If the space they offer, though, is not needed for these purposes, it can be used for some kind of room to please the fancy of some member of the household or to meet a special need. Or it may be partitioned off to serve several purposes.

Maybe the woman of the house would like to have a sewing room, or a studio. If so, the attic is a fine place for either of these. Or a den can be built there for dad

and the boys, where complete freedom can be enjoyed.

As no standards have been set up for rooms of this kind, as has been done for most of the other rooms in a house, informality and originality can be called into play. No matter how unconventional the furnishings or finish of the rooms in an attic or basement may be, the fact that they seem set apart from the rest of the house in a realm of their own, makes them seem very much in good taste. An infinite variety of finishes may be worked out for attic and basement rooms. Vertical wood panels are an easily installed and practical finish.

An additional advantage that comes from finishing the attic or basement of a house with lumber is the insulation that is obtained. Wood itself is one of the best insulators known. When an attic or basement is sheathed with wood a considerable amount of heat will be conserved during cold weather and all of the other rooms of a house will be more easily kept warm.

The attic of one home has been finished to resemble the interior of a log cabin. It would be easy to get one's thoughts away from the routine of everyday city living in a room such as this. Interiors suggestive of some other part of the world or of some earlier time in history, to suit the fancy of an individual, could be reproduced with good effect.



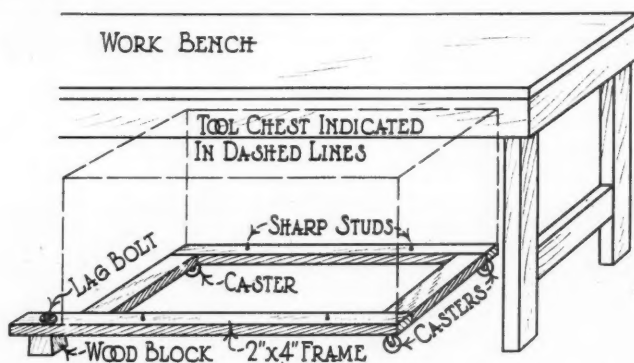
View of End Room Showing Knotty Hemlock Paneling and Built-in Bunks.

Practical Job Pointers

Support for Tool Chest

FIND the handiest place in the shop for my tool chest is under the work bench but, pulling it out and pushing it back was not handy till I worked out the device shown in the sketch. Now it can be pulled out easily whenever I want to get at it.

For this device, make a frame about the size of the tool chest, of 2 by 4 material, mortised and tenoned together. Allow one side of the frame to extend six or eight inches at the end, as shown, so that when the chest is pulled out it will clear the face of the work bench and allow the lid to open.



With This Frame on Casters the Tool Chest Under the Bench is Always Easy to Get at.

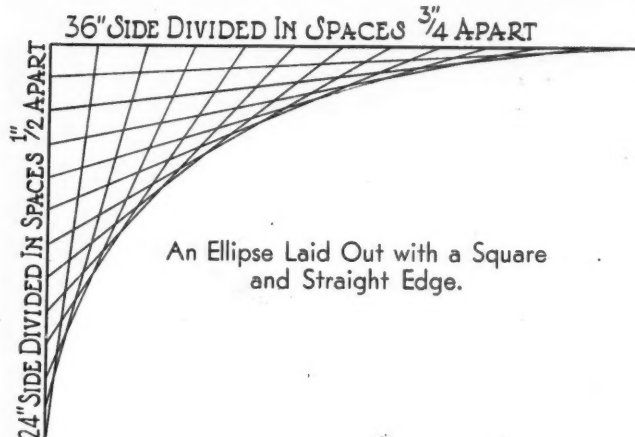
Put a wooden block, of the same height as the casters, under this extension and bolt down through the frame and block and into the floor. This forms a center, or pivot, for the frame to swing on. Put good casters under the other three corners of the frame. Also put four sharp studs, extending about $\frac{1}{4}$ -inch above the frame, in its side pieces, to engage the bottom of the chest and hold it in place. Fasten a block to the floor, back of the frame, to stop it on a line with the work bench. Set the tool chest on the frame, and the job is complete.

H. O. PEASE, Wapello, Iowa.

Laying Out An Ellipse

THE sketch shows my method of laying out an ellipse. I have used this method for several years and find it most convenient because the only thing required is a square and straight-edge.

I first mark off the 24-inch side in $\frac{1}{2}$ -inch spaces and then



A Readers' Exchange of Tested Ideas and Methods, Taken from Their Own Building Experience. Two Dollars Will be Paid for Each Contribution Published in This Department.

mark off the 36-inch side in $\frac{3}{4}$ -inch space. I use $\frac{3}{4}$ -inch spaces for the 36-inch side because 36 inches is one-half more than 24 inches so the spaces should be one-half larger. Using the straight edge I connect the marks on the 24-inch side with the marks on the 36-inch side as shown. This method produces an accurate ellipse. The

same method can be applied to an ellipse of any size.
C. C. MERCER, Box 4, Harrisville, Ohio.

To Use in Laying Floors

HERE is an idea for the carpenter who lays hardwood floors. Anyone who has done this work knows how tired and sore his knees get on such a job. This can be avoided, however. Have a patch pocket sewed onto each knee of your overalls, then slip a soft rubber sponge pad into each pocket. These pads can be bought at any 10 cent store and one pad, cut in two, is all you need.

J. M. SCUDDER,
Farmington, Ill.

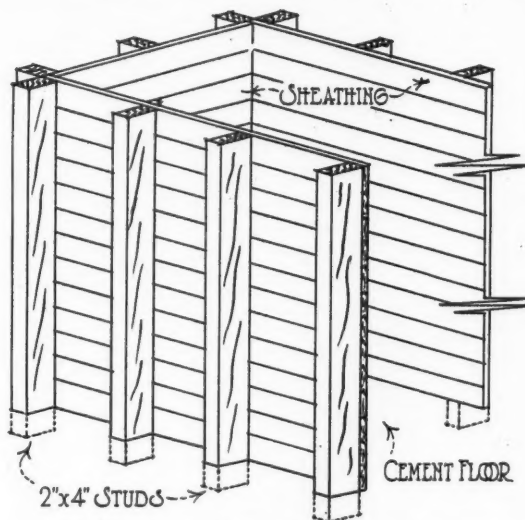


Sponge Rubber Pads,
Prevent Sore Knees in
Laying Floors.

A Sturdy Coal Bin Construction

WHEN building a coal bin I use what I consider a much better type of construction than is ordinarily used. I use 2 by 4 uprights, placed 24 inches on centers. I cut holes in the basement floor of the right size to receive these uprights and bury the uprights at least six inches. The tops are nailed securely to the floor joists above with 20 penny nails. The sheathing is nailed on the inside of the uprights with the result that it will withstand the weight of any ordinary amount of coal.

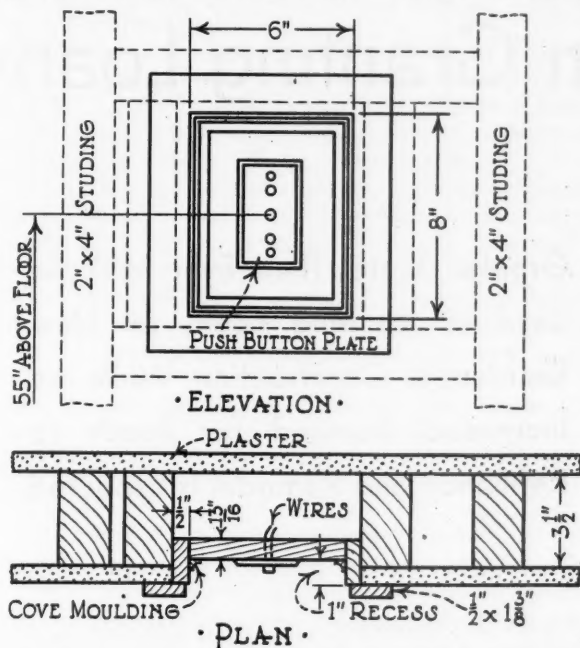
FRANK F. LISA, 1471 Dixwell Ave., Hamden, Conn.



Building a Coal Bin This Way Assures
Against Breaking.

Recessed Switch Plates

THE usual method of installing the push button plate for gas-fired furnaces is to cut a hole in the plaster and screw



A Recessed Installation for a Gas Furnace Switch Plate Makes a Better Job.

the plate to the lath. There are several objections to this method. The plate being set flush with the plastered wall is often mistaken for an electric light switch. Also this does not give a substantial bearing for the plate to be screwed to and, as a result, the plate works loose in time, causing the plaster to crack, peel off and fall on the floor.

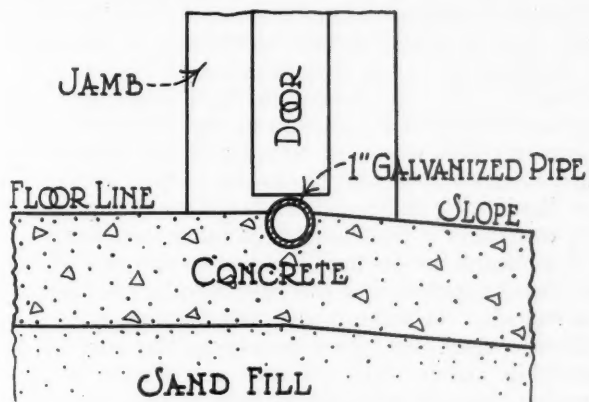
With the method of installation shown in the sketch, the plate is recessed into the wall, neatly and firmly cased in and, when painted to match the trim, looks attractive. Being recessed makes it distinctive so that it will not be mistaken for a light switch.

J. B. FRANZINI, 905 McKelligan Ave., El Paso, Tex.

A Garage Door Threshold

AN excellent metal threshold for garage doors, or any doors with concrete sills, can be made as shown in the accompanying sketch. This threshold consists of a piece of 1-inch galvanized pipe, cut to the full width of the door opening between the jambs. Slightly more than half its diameter is buried in the concrete sill, which holds it firmly in place, permanently.

With such a threshold in place, the door can be fitted with a minimum clearance at the bottom without causing



A Garage Door Threshold Consisting of a Pipe Has a Number of Advantages.

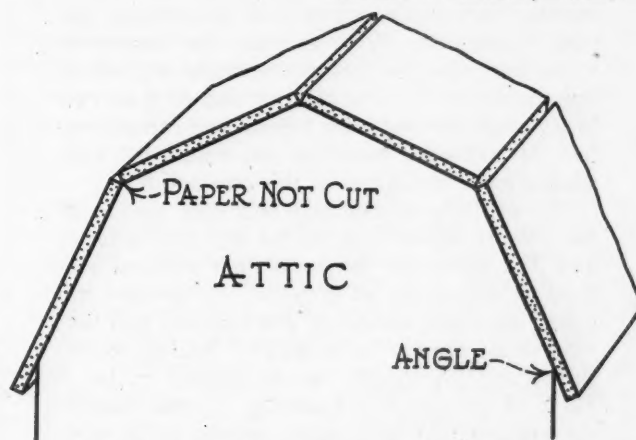
the friction that would result with a flat threshold. Gravel, stones and dirt will not lie on this threshold and hinder the closing of the door.

BUELL S. HUNSBERGER, 1401 Johnston St., Grand Rapids, Mich.

Applying Plaster Board

IN applying plaster board in an attic, or any place where there is an inside angle to be turned I find the following method works well and reduces the number of cracks. I cut the paper on the back side of the board with a knife. The board can then be broken, without breaking the paper on the front side, and fitted to any angle. The paper on the face side is strong enough to hold the board together and eliminate a crack in the wall surface. The sketch shows how the board is fitted to an angle by this method.

CHARLES N. MANGER, Ulster, Pa.

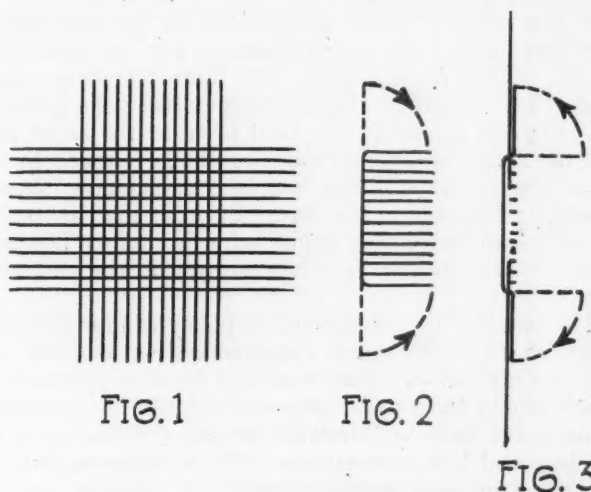


With the Face Paper Uncut Plaster Board Can Be Fitted to Any Angle.

Mending Broken Screens

IF, at the first appearance of a hole in a screen, it is properly repaired, the screen can be saved for further service. Take a piece of wire cloth and cut from it a square $1\frac{1}{2}$ inches larger than the diameter of the hole. From each side of this square, remove the wires running parallel with the side to a depth of about half an inch, as shown in figure 1.

When this is done, bend the projecting ends to a right angle as indicated by the dotted lines in figure 2. Now slip



A Method of Applying a Patch to a Hole in Screen Wire.

these bent ends through the screen so that the square piece covers the hole. The projecting ends can then be bent back, as in figure 3, or may even be slipped through the screen again, if desired.

H. H. SIEGLE, Emporia, Kan.

"Building and Loan" Associations Likely To Be Conservative In Granting Loans

LIKE all conventions of its kind, the recent meeting of the U. S. Building and Loan League in Philadelphia developed divergent views among delegates and among speakers. In this article, written by a staff member who attended the convention from beginning to end, an attempt has been made not only to express what appeared to be the collective thought, attitude and will of the convention as a whole but also to give certain viewpoints that were typical and representative of individual opinions expressed by both speakers and delegates at this convention.

The attitude of building and loan men is of the utmost importance to the building industry and it is advisable to gauge their national attitude as accurately as possible. At present this collective consciousness of the building and loan men would appear to be against lending money on second mortgages, would appear to be in favor of conservative financing on new residential construction, and would appear to be withholding judgment on any scheme to rediscount mortgages through a central bank.

DURING the coming year it is probable that building and loan associations throughout the country will stick to the conservative methods of financing that have given them the soundness and stability to which their leaders pointed with pride at their Centennial Convention, held in Philadelphia, August 10 to 15, which was attended by about 1,300 American, as well as a number of foreign delegates.

A few leaders voiced the opinion on the convention floor that more conservative financing was the answer to the ills of the present time, that there had been overproduction of homes, that mortgages had been granted for too great a part of the total price of the home and that the sound and conservative methods pursued by all but a few outlaw building and loan associations should be strictly followed in the future in order that the building and loan movement might achieve another hundred years of such success as it has enjoyed in the past century.

The reasons for a conservative policy in granting new loans on new residential construction were given as: (1) The number of homes now held by some associations which would have to be disposed of; (2) an increased demand for cash withdrawals by shareholders in some building and loan associations; (3) an apparent surplus of homes in some localities, and (4) requests for refinancing.

The sound and stable condition in which all but a very few building and loan associations throughout the country now find themselves was made apparent by a report of the Secretary-Treasurer, H. F. Cellarius, who stated that savings, building and loan associations in the United States gained, last year, more than twice as many share-

Greater Care Than Ever Will Be Used in Allowing Loans on New Residential Construction While an Increased Demand for Funds to Refinance and Remodel Is Expected

holders as they gained in 1929, that total assets of the associations increased \$128,964,939 during the fiscal year ending December 31, 1930, that there was a total membership in building and loan associations in this country at the end of 1930 of 12,336,754 and finally, that the total assets of these associations at the end of 1930 was \$8,828,611,925.

Greater demand for funds for refinancing and remodeling was reported by Mr. Cellarius; there did not seem to be so much new building, he said. Much greater care was being used in allowing loans although some communities report a surplus of funds for which there is no demand.

Local Conditions Differ

The influence of local conditions on the thoughts and ideas of the various delegates was apparent all through the convention, differences of opinion being noticeable on a number of points, but the majority of the delegates seemed to side with leaders expressing conservative opinions.

The sharpest debate of the session arose when the full body of the convention was considering the proposal for a new Federal Home Loan Bank, advanced by Charles O'Connor Hennessy, President of The Franklin Society for Home-Building and Savings, of New York City.

Mr. Hennessy was preceded on the program by Harry S. Kissell, President of the National Association of Real Estate Boards, which is now considering a proposal for the establishment of a Federal Central Mortgage Bank and regional discount banks, through which local mortgage institutions could discount mortgage paper on which debenture bonds would be issued and sold to the public.

Mr. Kissell introduced discussion of the Central Mortgage Bank with these words: "If there is anything but mere words in the preachments of home ownership which we have heard for the last 20 years on the part of everyone, then happenings of the past months are little short of a tragedy. If there is any sound social, economic or patriotic reason for tying people to the soil, if home ownership makes better citizens and discourages communism, then every possible help should be given to assist the prospective home owner."

"Isn't it a sad commentary," he continued, "on our financial set-up that the workingman cannot take advantage of low building costs and erect his home at the most advantageous time, but instead must build or buy when costs are at their peak?"

"Isn't it an indictment against our financial set-up that numbers of people who have saved for possibly five or ten years to pay for their homes have lost them because their mortgages have come due during this depression and they have been unable to refinance them?"

"I think it is the duty of everyone who has encouraged, either by word or deed, these people to undertake the purchase of a home, to stand by at this time and see that they do not lose their homes. To many of them it is the only transaction of the kind in which they will ever engage—it is the major effort of their entire lifetime and if they are honestly doing the best they can we must not let them fail."

Mr. Kissell pleaded for co-operation between the Building and Loan League and the Real Estate Association to work out a formula to solve the home financing problem.

Federal Home Loan Bank Proposed

As a new and improved variation of a scheme that had been advanced to building and loan associations thirteen years ago, Charles O'Connor Hennessy of New York, President of the Franklin Society for Home-Building and Savings, presented to the convention a proposal for a new Federal Home Loan Bank.

Mr. Hennessy said: "I believe the November meeting of the President's Conference, after months of research and consultation, may well offer the psychological opportunity for the presentation of an entirely new proposal, the approval of which by Congress might insure the establishment of a home finance system of tremendous significance to the social and economic welfare of our country. The proposal to which I refer is that Congress be asked to supplement the work of the local building and loan associations of the country by an enactment authorizing the creation of a nation-wide system of Federal savings and loan associations. Under this plan, subject to the approval of the Comptroller of the Currency, and under prudent limitations of Federal law, groups of citizens, anywhere in the country, might organize these mutual co-operative savings and home building institutions. The proposed Act of Congress would provide for the optional reincorporation, under Federal charters, of building and loan associations, co-operative banks, savings and loan associations, or homestead aid associations now operating under state laws. The conditions under which state institutions would be permitted to reincorporate under Federal charters would be, of course, an acceptance by them of the prudent and well-considered restrictions upon methods of operation to be imposed in the Federal statute. These restrictions would have regard, on the one hand, to the maintenance of absolute safety for the savings of the people, and on the other hand, for equity, simplicity, and substantial uniformity in the making of mortgage loans to home-seekers. The design of the system would be to bring the blessings and benefits of a Government-protected plan of systematic thrift and of aid to home ownership into every part of the continental United States. A carefully considered and wisely restricted Federal act that would include the well-tested features of existing state legislation would, I am sure, arouse a new and wholesome enthusiasm for thrift and home ownership in sections of our country where such interest is today lacking. I am convinced that the plan of offering the American people an opportunity to associate themselves with a democratic,

self-governing national system having these aims would be instantly successful. Incidentally, I am assured that were the system once established, it would lead to the incorporation under Federal charters of many of the best and most progressive of the state institutions of this character throughout the country. Thus would be brought into existence, very quickly, I believe, a national system of mutual co-operative savings and home-building institutions, substantially uniform in character, that would exemplify the virtues of self-help and self-reliance in our citizenship and that would inevitably take a high, worthy and permanent place in the financial structure of our country.

"Such a Federal Home Loan Bank would be a co-operative institution, organized, capitalized, and controlled, subject only to prudent governmental supervision, by its constituent member associations, as is the Federal Reserve Bank in the commercial banking field. Membership in it would be compulsory for every Federal savings and loan association. Like the Federal Reserve system, the Federal Home Loan Bank would function through district branches, designed to serve the credit needs of the home-seekers of various sections of the country. On the basis of collateral consisting of approved dwelling house first mortgages deposited with designated registrars, the Federal Home Loan Bank, with the approval of the supervising authority, would issue its low interest bearing bonds maturing in periods corresponding to the amortization of the mortgage collateral. The proceeds of the sale of these bonds would be made available for the use of the member associations, depositing the collateral. This would be to provide, on logical and well-tested lines, an adequate central credit system for the rediscounting of residential mortgages, such as is proposed by the more complicated and untried plan of our friends of the National Association of Real Estate Boards."

Building and Loan Men Cautious About New Plan

Sharp differences of opinion over Mr. Hennessy's plan developed in the convention and two resolutions expressing these divergent points of view were presented to the convention on the final day.

The first resolution was to the effect that the members
(Continued to page 96)

The chief feature of the Centennial Convention of the United States Building and Loan League at Philadelphia, Pa., August 10 to 15, was a proposal made to the convention to establish a New Federal Home Loan Bank. This bank, it is proposed, would be the central credit reserve organization for local associations which would operate all over the country on Federal charter, lending out money on mortgages according to methods controlled and regulated from the national organization. On the basis of the first mortgages thus made, Federal bonds would be issued and sold, the proceeds of the sale of these bonds to be made available for the use of the member associations.

This proposal is more fully described in the text. It was not actively followed up by the convention, a resolution calling for further study of the plan being tabled. It is probable, however, that committees will unofficially give this matter a great deal of study during the next twelve months.

Questions of Law Clearly Answered

Legal Rulings of Interest to All Builders

By LESLIE CHILDS

WHEN a contractor undertakes to perform work under the supervision of an architect, in accordance with definite plans and specifications, the question of the right of the architect to bind the owner for extras may easily arise. In such a case, the architect's power will usually be bounded by the terms of the contract, and he may or may not have authority to go beyond the payment provided for in the contract in ordering extras.

On the other hand, where an owner makes the architect his general agent in the letting of the contract and its after supervision, and the dealings between the parties are such as to justify the contractor in believing the architect has authority to agree to extras, the owner may be bound by the acts of the architect in this respect. As an illustration of judicial reasoning in a case of this kind, the following decision is worth a brief review.

Architects Agree to Allow Extras

In this case, the owners of a building lot desired to erect a building, and employed the plaintiffs, who were general contractors, to do the excavating for the building. Following the completion of this work, the plaintiffs sought to obtain the contract for the erection of the building, and the owners, defendants, told the plaintiffs to take the matter up with a certain firm of architects.

Plaintiffs thereupon interviewed the architects, and upon being shown the drawings and specifications, discovered the possibility of a conflict between the two. In the light of the excavating plaintiffs had recently completed on the proposed site of the building, they were of the opinion that the footings would have to be a greater depth than the drawings provided for if a suitable foundation was laid.

Upon making this discovery, plaintiffs called the attention of the architects to same, and declined to sign the contract unless it be agreed that, in case more concrete was required in putting in the footings than the plans called for, the excess should be classed as an extra. The architects readily saw the fairness of plaintiffs' position, and agreed to the proposition. This understanding was then embodied in the following letter which the architects sent to the plaintiffs:

"It is understood that if more concrete is needed than shown on the plans of the building, concrete necessary in foundation walls so that they are down to satisfactory bearing same will be considered an extra, should less concrete be used than shown, the owner is to get credit for same. * * *

Extra Concrete Required in Footings

The plaintiffs then signed the contract and entered upon the work. As they had predicted, the proper placing of the footings and foundation walls required a large quantity of concrete in excess of that called for by the plans. The amount of this extra material and work totalled about \$700 upon completion of the contract.

The work was all done under the supervision of the architects, and the latter included the extras up to

85 per cent, along with the other work, in issuing their certificates from time to time. The defendants, owners, made no complaint and paid these certificates as they were issued and presented.

Upon issuance of the final certificate, however, the defendants objected to the inclusion of the extras and sought to deduct the amount involved from the final certificate. Plaintiffs refused to permit this deduction and brought suit for the balance due.

In defense to this action, the defendants took the position that the architects had no authority to agree to any extras, and pointed to terms used in the contract that limited the powers of the architects. Further, the defendants contended that since the letter agreeing to extras was written by the architects before the contract was signed, and was not made a part thereof, it had no legal effect. The plaintiffs were given a judgment for the amount claimed to be due in the lower court. The defendants then appealed, and the higher court in affirming this judgment reasoned, in part, as follows:

Defendants Held Bound by Architects' Letter

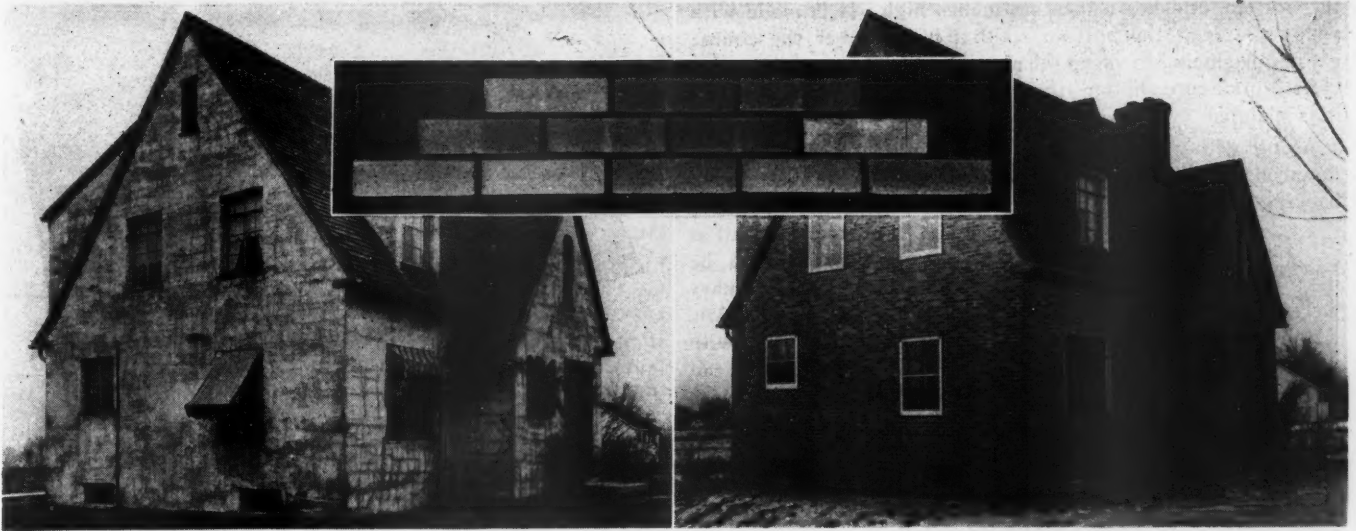
"It is urged that under the terms of the building contract the architects had no authority to make any such change therein, and various provisions of the contract are pointed out which define and limit the powers and duties of the architects.

"But the contract cannot govern upon this matter, because the so-called change or modification was made before the contract was executed or took effect, and at that time the architects were acting as the general agents of the defendants to let the contract, with power to bind their principals to the extent of their apparent authority.

"Defendants having directed the plaintiffs to go to the architects for the purpose of negotiating a contract, and having then placed no limitations upon the powers of the architects, are not now in a position to urge that anything found necessary to be done to the end that the contract be let was beyond the apparent scope of the authority of the architects.

"Furthermore, the failure to object promptly, and the payment of 85 per cent of the amount of such extras as the work progressed, was a sufficient ratification to bind the defendants. * * * After a careful study of the evidence, we find nothing which will warrant our disturbing the result reached by the trial court. The judgment appealed from affirmed." (243 Pac. 576.)

So, in this case, the contractors were allowed to enforce their agreement with the architects against the owners, but it is easy to see how a slight change in the facts might have resulted in a finding against them. While this case is one of value as illustrating circumstances under which an architect will be deemed to have power to bind the owner for extras, it is perhaps of greater value in pointing out the possible danger to contractors in taking too much for granted in situations of this kind.



Apparently This Old House Was Modernized with Brick Veneer, but in Actual Fact the Walls Were Overcoated with a New Product Consisting of Strips of Fiberboard to which Thin Slabs of Brick Are Cemented. This material, a single strip of which is shown in the inset, provides both insulation and a permanent finish.

New Materials Aid Remodeling

And Also Are Applicable to All Types of New Construction
Where Artistic Effects at Low Cost Are in Demand

SUPPOSE that brick veneer could be applied to old walls in sheets, just like wallboard. Wouldn't it be easy to do an attractive, low cost remodeling job on a lot of old houses we know about? And wouldn't it be easy to sell such a job? Well, it is possible to do just that, which means another way in which we can stir up some new business during these dull times.

Brick Veneer in Sheets

One of the newest products which has been offered to the building industry consists of brick slabs, one-half inch thick, made of burned clay just like any other brick, which

are permanently mounted, in mastic, on strips of fiber insulating board. Twelve slabs are mounted on each strip, spaced as in standard brick construction. There are special strips for use around openings and at corners.

The strips, or panels, are simply nailed, through the joints between the brick slabs, to the walls of the building. When joints are filled with regular brick mortar, the finished wall can hardly be told from regular brick work.

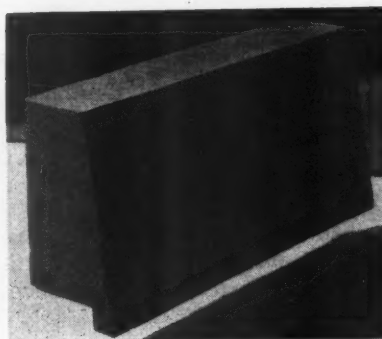
Here, in a single process, you cover the old, ugly, or deteriorated exterior with a real brick veneer and, at the same time, add an overcoat of insulation which makes the house warmer in winter, more economical of fuel and cooler in summer.

Shingles of Burned Clay Brick

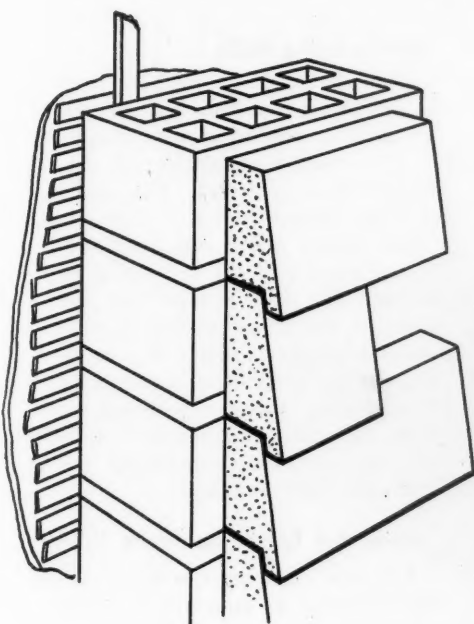
It seems that the brick manufacturers have been unusually busy lately devising new, practical, and interesting products for the builder to work with. A new product which opens up a whole new line of architectural possibilities, might be described as a shingle, made of burned clay, just as brick is made.

This new shingle-like brick is nine inches long, two inches thick at the top, two and a half inches thick at

Burned Clay Brick in a New Form Which Produces a Shingle Effect Offers Interesting Architectural Possibilities.



For further information on any of the products mentioned on these pages write American Builder and Building Age, Information Exchange, 105 W. Adams St., Chicago.



the bottom, and has a face six inches high. It is made with an overhang at the bottom so that it laps over the course below producing a deep shadow line. This overlap also resists moisture better than ordinary brick construction it is claimed.

Along with this new brick, the manufacturers have announced a hollow block of burned clay to be used as a backing material. The block and brick construction produce

an excellent wall at a cost said to be lower than ordinary brick construction. The new brick with the overhang, can also be used with any type of construction where brick veneer is commonly used.



Wood Flooring Blocks, Designed for Residential, Commercial and Industrial Floors.

Wood Block Flooring

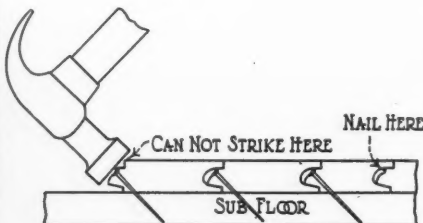
While the brick makers have been devising new materials to aid the building industry, the flooring manufacturers have not been idle, but have been improving their products and their methods of application. One of these new products has been designed to fall in line with the trend to modernistic block flooring.

The blocks, which are available in oak, maple, beech and birch, are produced in types suitable for all kinds of residences, and commercial and industrial buildings.

The new block has a dowel pin construction which prevents cupping and overcomes any tendency to warp or change in size or shape, and affords great resistance to traffic strains. The blocks are laid in a mastic which provides resiliency and deadens vibration and sound. A new type of interlocking joint is used which greatly facilitates laying.

Ready-Finished Oak Flooring

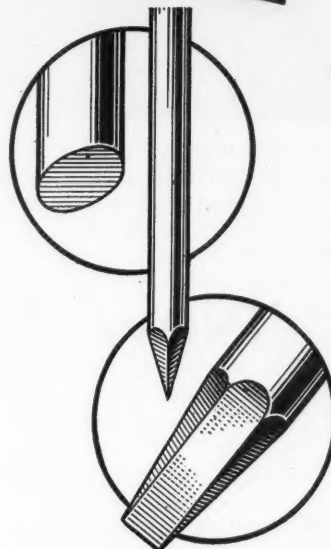
Then there is a new, ready-finished oak flooring which is scraped, sanded, filled, finished and waxed at the factory



Factory Finished Flooring, Bored for Nails and Designed to Produce a Perfectly Even Surface.



This Oval Nail, with a Chisel Point, Will Not Split the Wood and Does Not Bend So Easily as an Ordinary Nail When Driven into Hardwood.



and delivered at the job ready to be laid and immediately used. It is also bored, at the factory, for nailing. The result is that it can be laid quickly and easily and requires no hard hammering which might damage a plastered ceiling below.

In addition an even joint between the strips is assured by the specially designed, tightly fitting, wedge-shaped tongue and groove, and the bevel lip under the tongue which bring the two boards perfectly even on the surface after they have been drawn together with the nails. A clearance is provided for the nail heads in the tongue so that they will not raise the upper part of the groove and create a bulge on the floor surface.

Non-Splitting Nails

One would hardly think of nails as something that could be improved by new designing, but they are nevertheless. One company has produced a nail of a new design which is primarily intended to prevent the splitting of the wood into which it is driven. This nail is oval in cross section and has a chisel point.

The chisel point cuts into the grain of the wood and the slim, oval body of the nail has little tendency to split. In addition the shape makes a stiffer nail which is easier to drive into hard wood without bending. The non-splitting feature reduces waste of flooring, trim and other material. The resistance to bending and the easy driving speed up the work and save time and labor.

More and Better Basement Windows

The steel basement window is generally accepted as standard nowadays and every year the manufacturers are turning



This New Steel Basement Window Has Recently Been Brought out by One of the Leading Manufacturers of Building Materials.

new window is of copper steel construction to resist rust and so designed that it will not warp or stick.

It is also designed to be thoroughly weather-proof. The frames and ventilators are accurately fitted and contact uniformly, and the cam-action lock draws the ventilator tight against the frame. These features, together with the integral drip make the sash storm and weatherproof, and there are hooded weepholes which allow the draining of condensation.

These windows may be glazed either with putty or with wire glazing clips. The sash can be removed for cleaning when opened to the horizontal position. They are also interchangeable.

Also Steel Coal Doors

Steel coal doors, too, have become standard and the same company is offering a new coal door of heavy pressed, not cast, steel construction throughout. It too is of the rust resisting copper steel and thoroughly weatherproof. It is strong enough to resist the shocks of coal delivery and so designed as to be proof against burglars.

There is an exceptionally strong, self-closing lock on top of this door and a heavy spring assures locking when the door is closed. The hinges are so constructed that they hold the door up against the

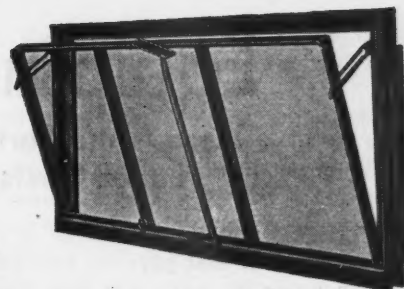
For further information on any of the products mentioned on these pages write American Builder and Building Age, Information Exchange, 105 W. Adams St., Chicago.

out new and better windows. So the announcement of another basement window from one of the big manufacturers is just the thing to be expected. This

building when coal is being delivered, which protects the wall.

More Window Improvements

Another manufacturer of steel basement windows has announced two new models. One of these embodies several new features including a convenient locking bar which extends from the top to the bottom of the sash and permits the window to be unlocked or locked from the sill level. It also opens from the top, for indirect ventilation, or swings full open from the bottom.



Several New Features Have Been Incorporated in This New Model Steel Basement Window.

A newly designed type of double channel construction, which provides double contact all the way around, plus unusual strength and rigidity, is used. An easily operated friction lock further insures double contact at all points and a new hinge construction eliminates the necessity of notching either the sash or the frame.

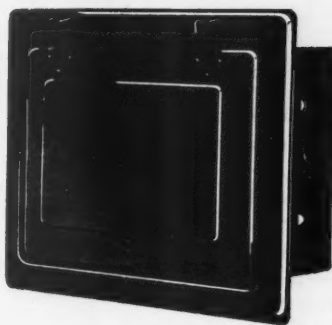
The other new model was especially designed for those with whom price is the first consideration. It is, however, a well-made serviceable product.

Swinging Double Hung Windows

One of the most interesting inventions which has made its appearance lately is a device by means of which any double hung window can be made to swing on a pivot, with the top swinging either in or out. This

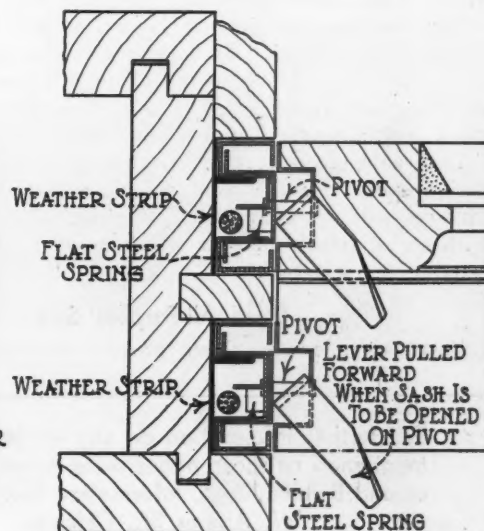
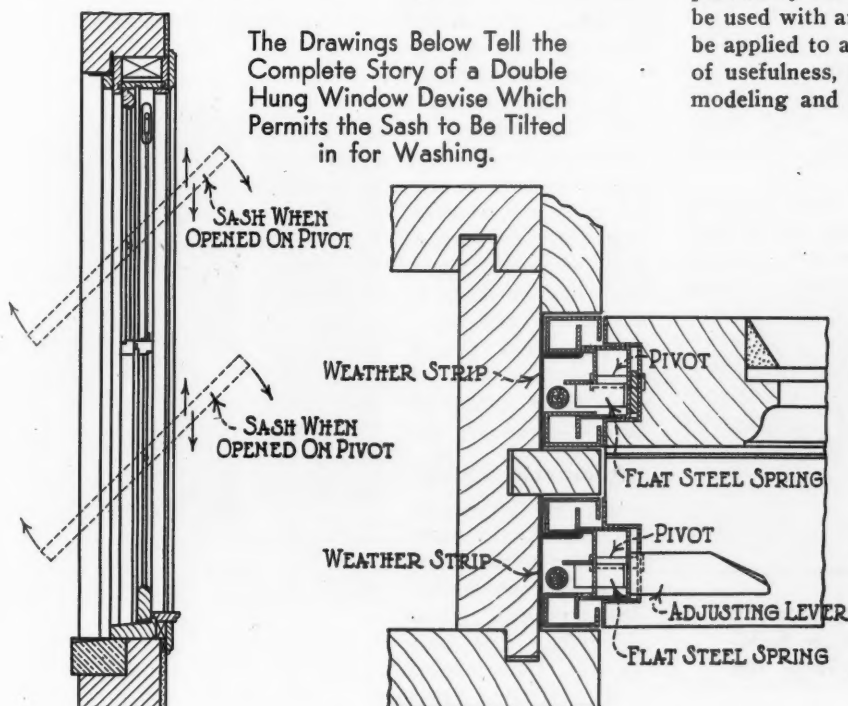
makes it possible to wash windows entirely from the inside.

This device, which is really quite simple, is better explained by the drawing than could be done in words. It can be used with any standard weatherstrip. The fact that it can be applied to any double hung window, gives it a wide range of usefulness, not only in new construction but also in remodeling and repair work.



An Improved Type of Steel Coal Door Is Another Recent Announcement.

The Drawings Below Tell the Complete Story of a Double Hung Window Device Which Permits the Sash to Be Tilted in for Washing.



Equipment That Pays Its Way

Here Is the Sort of Equipment, Tools and Machines, That Reduces Labor Costs and so Increases Profits on Building Contracts

THERE are just two kinds of contractor's equipment, equipment that pays its way and equipment that does not pay its way. The first kind is invaluable to any contractor or builder, the second kind is worse than useless. But in these days of close competition between manufacturers most of the equipment offered is highly efficient for the purpose for which it was designed. If it fails to pay its way it is probably because it was not properly selected for the purpose, or because it is not properly used. So it will pay the buyer of contractor's equipment to learn as much as possible about the available products and their use.

Small Sander Made Dustless



The Dust Problem Has Been Brought Completely Under Control in This New Portable Sander.

Among other machines which are being improved constantly is the sander made by one of the leading manufacturers. This company has recently brought out a small sander of the portable type in which the dust is perfectly controlled, by means of a fan built into the machine. A powerful vacuum created by the fan draws the dust into a bag which can be emptied through a zipper opening or removed by a twist of the coupling. The dust collecting feature not only keeps

the air clean but prevents excessive clogging of the belt which means faster work and long belt life.

This machine has a wide variety of uses which are not limited to woodwork. By using the proper type of abrasive it can also be used on metal, stone, and concrete, and for polishing and rubbing. It is also furnished with a bench stand which converts it into an edge sander or grinder.

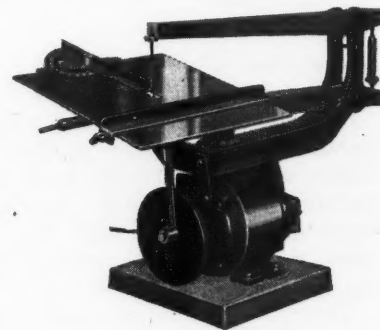
The same company also offers a floor edger of identical design except for the front pulley assembly which permits sanding within $\frac{3}{8}$ of an inch of the baseboard. It is equipped with an adjustable bumper which prevents the pulley from marring the woodwork.

Small All-Purpose Saw

Small electric saws have proved extremely valuable in

building work. One of the new ones in which a new principle of operation has been incorporated, offers dependable service at low cost. This machine is of the jig-saw type and can be used for all sorts of cuts, rip or cross cut, angular, circular, scroll or compound angle. It will cut up to 2-inch stock in the hardest woods and will, except for thickness of cut, do all the work of a 16-inch band saw, including the cutting of soft metals.

The saw is driven at high speed on a short stroke, from the direct drive shaft of a $\frac{1}{4}$ h.p. motor. It has a patented counter balancer and silencer, mounted on the end of the motor shaft, to which the connecting rod is attached. This reduces vibration to a minimum and insures smooth cutting at high speed. The saw draws away from the cut on the upstroke which prevents back drag and reduces the tendency of the saw to raise the wood from the table.



All Kinds of Cuts Can Be Made in the Hardest Woods with This Simple Saw.

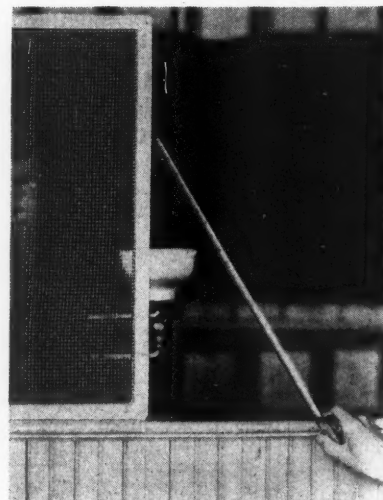
A Tape and Rule in One

A remarkably handy measuring tool has recently been announced by one of the established manufacturers of measure equipment. This is a steel tape, furnished in six-foot length, marked either in inches and fractions of inches, or in feet and tenths and hundredths of feet, and so made that, unsupported, it may be projected like a rule. At the same time it will also flex to measure curves like an ordinary steel tape.

This tape-like rule winds into a chromium plated case only two inches in diameter. A smooth-working, spring winding device, with a ratchet stop is controlled by a push button just as in any other spring winding tape. The tape is manually withdrawn from the case so there is never any danger of its flying out, out of control. The price of this handy device is quite moderate.

Adjustable Screed Gauges

In concrete work there are certain items of equipment which definitely qualify as equipment that pays its way. One of these is an adjustable, metal,

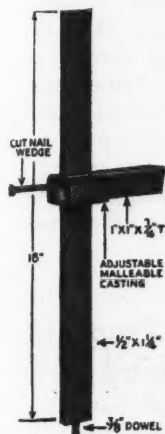


A Rigid Six-Foot Rule and Flexible Steel Tape in One, Is Both Novel and Practical.

For further information on any of the products mentioned on these pages write American Builder and Building Age, Information Exchange, 105 W. Adams St., Chicago.

screed gauge of metal which saves not only on material but also on labor. With these screed gauges the difficulty of accurate adjustment is entirely eliminated, with a saving in carpenter labor.

In use, these gauges are simply driven into the form decking, after boring a starting hole. The simple casting, with a cut nail wedge, is then adjusted to the proper height. It can then be adjusted either before or after the gauges are set up depending on the accuracy desired, and absolute accuracy can be obtained by setting with an instrument.



This Screed Gauge Saves Labor and Materials.

Clamps to Splice Shores

Waste due to the use of nails, lumber for cleats, lumber cut off shores, and the labor used in cutting and nailing the lumber, as well as the inconvenience of handling, will pay for splicing clamps in less than a year, it is stated.

These clamps are placed by sliding them onto the shoring timbers, inclined in the direction of the load, and driving in the wedges. They are quickly removed by driving the wedges back and releasing, which saves time in taking down the forms.

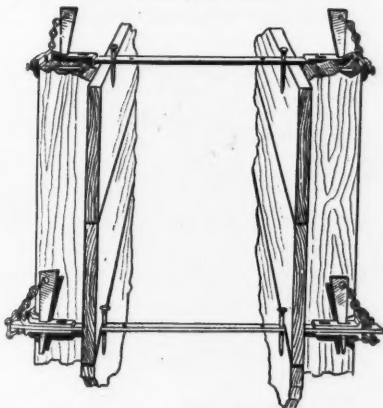
With these clamps it is possible

to lengthen or shorten the shores at will. These clamps are made to work on four by four timbers.

When combined with the adjustable shores, made by the same company, this clamp produces a lower priced adjustable shore which permits the contractor to use random lengths of four by four. Only one tool, a hammer for driving the wedges, is needed to set them up.

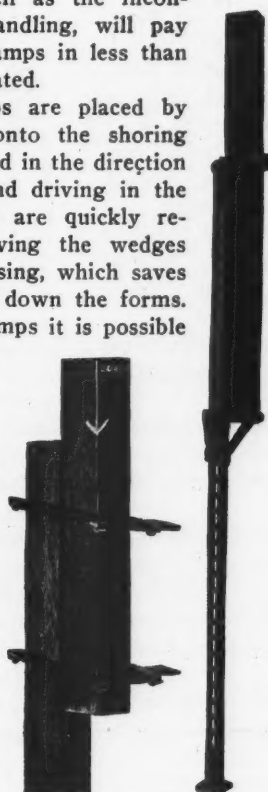
Adjustable Form Ties

An efficient tie, for clamping concrete forms together and holding the forms apart, in an economical manner, has been provided in the device illustrated. This tie is standardized in four



Efficient and Economical Clamping of Concrete Forms with Adjustable Clamps.

the clamp, the wedge is inserted and driven up with one or two blows of the hammer, and the form is completely



These Clamps and Shores Provide Low-Priced Adjustable Equipment.

sizes so that over-orders of ties for use on any job can be utilized on future work. The adjustment is simple and perfect, to the smallest fraction of an inch, because it is made with a continuous take-up.

It is a simple matter to place these clamps on the forms. The clamp unit is fastened to the studding by driving one eight penny nail. The strip unit is slipped through

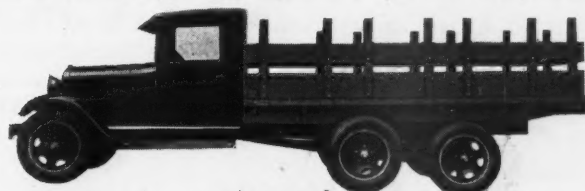
clamped. The slots in the strips are positioned so that a six penny nail can be inserted as a spacer to hold the forms apart on each inch size.

Regardless of how well other equipment may be selected, there still remains the problem of transporting it to the job, along with materials. That problem is being ably handled by the truck manufacturers who are constantly offering improved models especially designed to meet the requirements of the builder. Two new models have been announced quite recently.

Six-Wheel Unit for Light Trucks

The well known advantages of multi-wheel construction for heavy duty trucks, which has been so highly developed by R. B. Fageol, has recently been made available for light trucks. The basic principles of the Fageol six-wheel design have been incorporated in a multi-wheel unit for application to light trucks, either Ford or Chevrolet, 1½-ton models.

The accompanying illustration shows a typical installation, converting a light truck to a six-wheeler. The advantages claimed for this type of equipment are: greater pay loads per



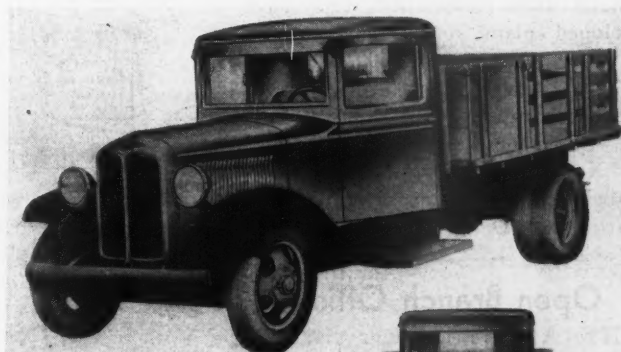
A Light Truck Converted Into a Six-Wheeler for Increased Economy of Operation.

transportation unit; better load distribution; reduction of road shock by one half, with attendant lessening of wear and tear on the chassis and the load; longer life for tires, and greater safety through the reduced tendency to side-slip.

Trucks in Low Price Field

In the low price field, another truck manufacturer is now offering a new truck in either four or six-cylinder type. Both the four and the six are offered in 136-inch wheel base and both include a number of features, it is stated, which were formerly associated only with trucks in a higher price class.

The engines have large displacement and heavy crankshafts in bronze bearings. Full pressure lubrication is used. Roller bearings are used in the differential and rear hubs. Four wheel brakes assure maximum safety. A wide variety of bodies is available in these trucks to adapt them to practically any usage.



One and One-half-Ton Trucks Like This Are Available in Either Four or Six Cylinders at Low Cost.



Building Activities

The Month's News of the Industry

To Hold Joint Convention

DUE to the many common interests of the three organizations, the National Association of Sheet Metal Contractors, the Roofing Division of the National Slate Association, and the United Roofing Contractors Association of North America, will hold a joint convention this year, for the first time. The convention is scheduled for the week of January 25, 1932, at Louisville, Ky.

The three associations will meet together, to discuss topics of mutual interest, and in separate sessions to transact their individual business. An exhibit, worked out along educational lines, to show the progress of the trade through new productions, will be held in connection with the joint convention.

Opens Bids on \$19,000,000 Mississippi Bridge

BIDES for the construction of the \$19,000,000 Public Belt railroad and highway bridge over the Mississippi River, just above the New Orleans city limits, will be opened at that city on September 15. It is expected that the bridge will be used by the Southern Pacific Lines and possibly by the Texas and Pacific Railroad. The State of Louisiana has applied \$7,000,000 of its road bond issue to the bridge to take care of the highway portion of the structure.

Offer Granary Plans

CHEAP and efficient farm storage has been given much attention by engineers of the National Lumber Manufacturers Association. They have developed plans for granaries ranging in capacity from 2,500 to 50,000 bushels. These plans are available, free of charge, through lumber dealers, or may be obtained directly from the National Lumber Manufacturers Association, 702 Transportation Bldg., Washington, D. C.

Open Branch Office

THE American Floor Surfacing Machine Co., Toledo, Ohio, announces the opening of a new factory controlled branch office at 553 Bergen St., Newark, N. J. A complete stock of machines, parts and supplies will be carried to insure quick service for the northern New Jersey territory which this branch will serve.

Coming Events

Sept. 17-18, 1931—National Hardwood Lumber Association, Annual, Hotel Sherman, Chicago.

Sept. 19, 1931—Louisiana Retail Lumber and Material Dealers' Association, Quarterly, Lafayette.

Sept. 28-30, 1931—Concrete Reinforcing Steel Institute, Semi-annual, Buckwood Inn, Shawnee-on-Delaware, Pa.

Oct. 12-16, 1931—American Gas Association, Annual, Atlantic City, N. J.

Oct. 13-16, 1931—Illuminating Engineering Society, Annual, William Penn Hotel, Pittsburgh, Pa.

Oct. 27-30, 1931—National Retail Lumber Dealers Association, Annual, Book-Cadillac Hotel, Detroit.

Oct. 27-31, 1931—American Institute of Steel Construction, Annual, Greenbrier Hotel, White Sulphur Springs, W. Va.

Nov. 10-12, 1931—American Petroleum Institute, Annual, Stevens Hotel, Chicago.

Dec. 7-9, 1931—Associated Leaders of Lumber and Fuel Dealers of America, Annual, Congress Hotel, Chicago.

Jan. 25, 1932—United Roofing Contractors Association, Annual, Louisville, Ky.

Jan. 25, 1932—National Association of Sheet Metal Contractors, Annual, Louisville, Ky.

Jan. 25, 1932—Roofing Contractors Division of the National Slate Association, Annual, Louisville, Ky.

Jan. 25-29, 1932—International Heating and Ventilating Exposition, Cleveland, Ohio.

Byers Takes Option

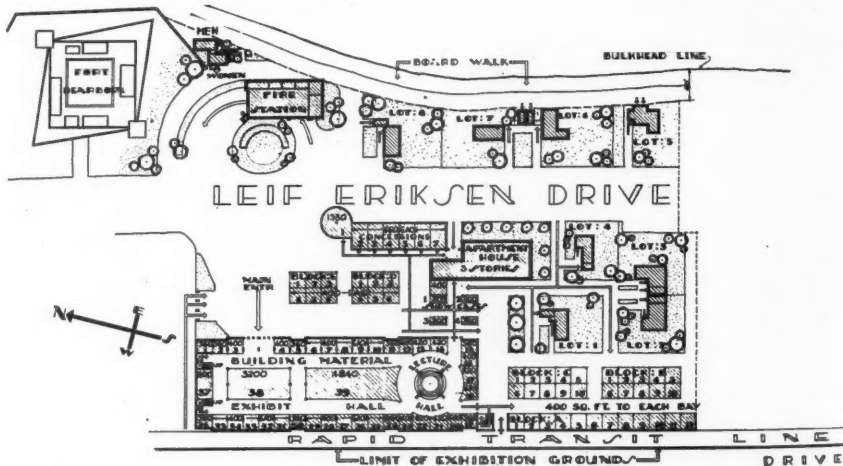
THE A. M. Byers Company, Pittsburgh, Pa., manufacturer of wrought iron products, has taken a six months' option to purchase the Canonsburg Steel & Iron Works, Canonsburg, Pa., maker of black and galvanized sheets. The Canonsburg Company, which is controlled by the Edwards Mfg. Co., Cincinnati, Ohio, has an annual capacity of 38,000 tons of black sheets and 16,000 tons of galvanized sheets. It is understood that the company will roll iron sheets in an experimental way for the Byers organization over the next few months.

Plan Century of Progress Housing Exhibit

FIVE acres of ground have been set aside for a housing exhibit, in the Century of Progress Exposition to be held in Chicago in 1933. This exhibit will be located south and west of the replica of old Fort Dearborn now standing at 26th St., and the lake front.

It will contain, in addition to a main exhibit hall and open pavilion exhibit space, eight residences, an apartment building, garages, and a model fire station. As now planned, it will demonstrate as many different types of housing conditions, with the current solution for each, as it is possible to show within the allotted space. These will include urban, suburban and semi-rural dwellings.

The exhibit is expected to be a convincing demonstration of how low-priced living units may be provided for people in moderate circumstances. Exhibit space will be available to contractors with practical and interesting schemes of construction and to manufacturers of building materials.



A Five-Acre Space on the Grounds of the Century of Progress Exposition, Has Been Allotted to a Housing Exhibit and Will Be Laid Out According to This Plan.

YOUR PROSPECTS WILL LIKE THE NEW GENERAL ELECTRIC HEAT REGULATOR



NOW you can equip the homes you build with a heat regulator by General Electric—providing truly modern efficiency in heating, comfort and convenience. It will add a great deal to the sales-appeal that your houses will have for prospective buyers.

The General Electric Heat Regulator is made for every type of heating system. It has exclusive features which make heating less troublesome, more healthful, more satisfactory and more economical—it is bound to interest every one who is thinking of buying a home.

Because of General Electric specialized production, the price of this new heat regulator is well within reach. A single-range

model, for manual adjustment of temperature, sells for \$85, completely installed. A double-range model—with an *electric timer*, which operates on the control unit in the *basement*, and makes day and night temperature changes automatically—sells for \$125, completely installed. These prices include all necessary equipment.

Extensive advertising is acquainting millions of people with this new GE product. This is *your* opportunity to make profitable use of the wide publicity being given it. Liberal discounts are offered. See the GE distributor in your territory—or write for information to Penn Heat Control Co., *National Distributors*, Franklin Trust Bldg., Philadelphia.

GENERAL ELECTRIC HEAT REGULATOR

FOR EVERY TYPE OF HEATING SYSTEM

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

CURRENT CONSTRUCTION FIGURES

Some Sections Show July Contract Increases

THE most encouraging fact to be found in construction contract figure for the month of July is that, in several sections of the country an increase was noted in spite of the fact that there is normally a seasonal decrease from June to July.

The country as a whole, however, showed a decrease of nearly 11 per cent from the June total. Residential building, for which the most immediate hope for recovery is held, showed a slightly greater loss than construction as a whole, amounting to a little over 12 per cent.

The sections in which an increase was recorded included New England, Upstate New York, the Middle Atlantic States, and the Chicago District. The New Orleans territory was the only one to show an increase in total construction as compared with July of 1930. This increase in the New Orleans territory, amounting to \$17,334,500, was due to gains in civil engineering and non-residential work.

Total contracts for the country, which amounted to \$396,821,253, were divided between the various classes of construction as follows:

Residential Buildings	\$150,284,925
Commercial Buildings	32,798,502
Factories	11,562,870
Educational Buildings	28,917,720
Hospitals and Institutions	10,995,882
Public Buildings	15,572,523
Religious and Memorial	8,028,186
Social and Recreational	9,606,162
Public Works and Utilities	129,054,483

Total\$396,821,253

These figures show the total volume of contract awards for the entire United States, as estimated by the American Builder and Building Age. They are based on the figures for contracts awarded in the 37 states east of the Rocky Mountains, as reported by the F. W. Dodge Corporation, together with factors to provide for construction in the 11 western states and for the smaller, unreported projects not covered by the Dodge reports.

Contracts for the 11 western states normally amount to about 10 per cent of the total for the other 37 states. During July the decrease in permits for these states was less than the contract decrease for the eastern states indicating a somewhat stronger activity. A factor of 11 per cent has, therefore, been used in this estimate.

Only a portion of the new building, modernizing and repair projects

of less than \$5,000 each is covered in the Dodge reports. This work, a large portion of which is rural, usually reaches a level during the summer months somewhat above the normal of 25 per cent of the total reported contracts. With the present uncertainty of the farm situation it is, at the present time, at about the normal level so a factor of 25 per cent is used in this estimate to account for it.

Since practically all of this work is home building or remodeling, it has been classified under Residential Buildings, in the tabulation.

Wisconsin Mechanics' Lien Law Strengthened

AN amendment to the mechanics' lien law, providing that the misuse of funds paid on a building contract shall constitute embezzlement, has been passed in the State of Wisconsin. This amendment, which is similar to laws adopted in Michigan and two other states, and to a provision incorporated in the uniform mechanics lien law which is now being prepared, states that moneys paid to a principal contractor or to any subcontractor on construction work shall constitute a trust fund in the hands of such principal contractor or subcontractor to the amount of all undisputed claims due or to become due from such contractor or subcontractor for work, labor and materials furnished, to persons otherwise entitled to a mechanic's lien against the owner and his property. The use and misapplication of such moneys for any purpose other than the payment of such claims until all claims, except those the subject of a bona fide dispute, are paid in full shall constitute embezzlement, and shall be punishable as such upon

the complaint of any aggrieved person.

In order to avail himself of this remedy, it is necessary, for a subcontractor, to have properly protected his right of lien, by service of the thirty-day written notice on the owner, otherwise he is not among those entitled to a lien, and has no claim against the moneys constituting such trust fund, and cannot, therefore, prosecute for embezzlement.

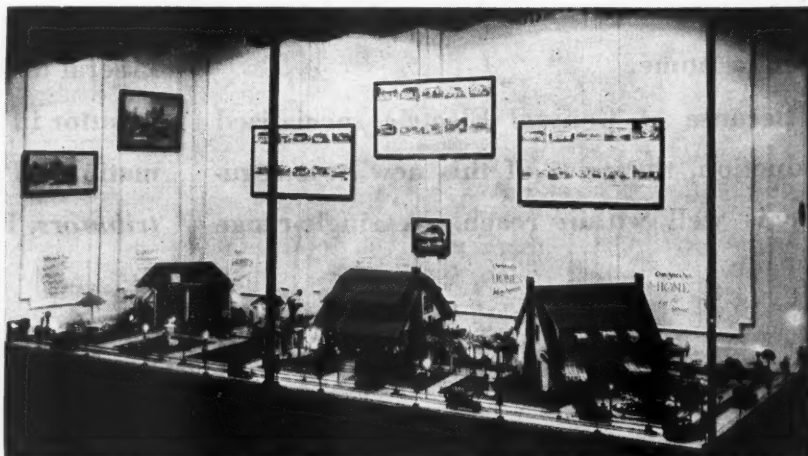
Celotex Broadens Line

A NEW merchandising policy, under which the Celotex Company, 919 N. Michigan Ave., Chicago, will broaden its services to building material dealers by handling a line of allied materials, manufactured for it by a group of organizations recognized as leaders in their particular fields, was recently announced by B. G. Dahlberg, president of the company.

Simultaneously, announcement was made of the addition of five products to the Celotex group. These are Ozite Building Blanket, C-X Lanite Insulation, C-X Orange Label Wallboard, C-X Green Label Wallboard, and Compo-Board. These products are now being manufactured under The Celotex Company's specifications. The Celotex lines now embrace twenty-four different products in the insulation and acoustical fields.

Name Advertising Manager

THE Universal Gypsum & Lime Co., 105 W. Madison St., Chicago, has announced the appointment of H. E. Jordan as advertising manager, with headquarters in the general sales department, in Chicago. The re-organization of this company's advertising department is further indication of the expansion plans which the company has been carrying forward consistently during the past several months.



Miniature Model Houses Displayed in a Dealer Window Were Effective Advertising in a Campaign of Merchandising Homes to the Buying Public.



Cut Operating Costs with FIRESTONE Balloons

"The combination of Firestone All Non-Skid Balloons with Firestone Puncture-Proof Tubes has solved our tire problems," writes Dolese Bros. Co. of Oklahoma City. "In fact, the service has been so satisfactory . . . road delays reduced to an absolute minimum . . . that on the strength of it, we just recently placed an additional order for two more trucks on which we specified the same combination—Firestone All Non-Skid Balloons and Firestone Puncture-Proof Tubes."

In the cement business—with loads

"mixed in transit"—road delays are costly. Perhaps in your business they are even more so. At all events, they're worth eliminating. Why don't you do what Dolese Bros. did — INVESTIGATE Firestone Tires and Firestone Service? The Firestone Dealer near you will gladly put all the facts and figures before you—and let you decide. Whether your trucks are light or heavy—for city delivery or long hauls—you'll find that Firestone Balloons will reduce road delays and cut operating costs.

Firestone

TRUCK BALLOONS

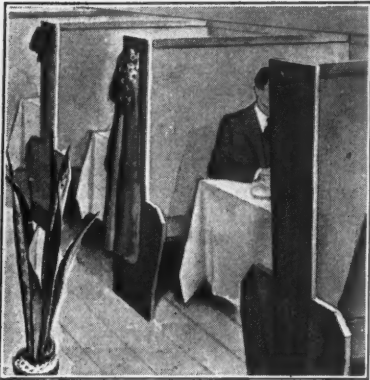
© 1931, F. T. & R. Co.

TIRES • TUBES • BATTERIES • BRAKE LINING • SPARK PLUGS • ACCESSORIES

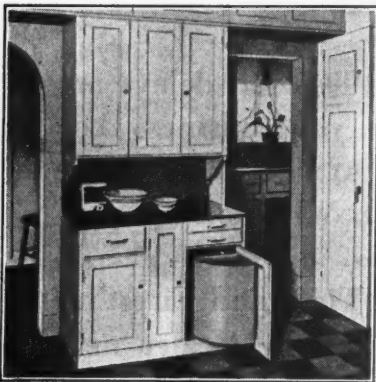
WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

Concrete-form LUMBER

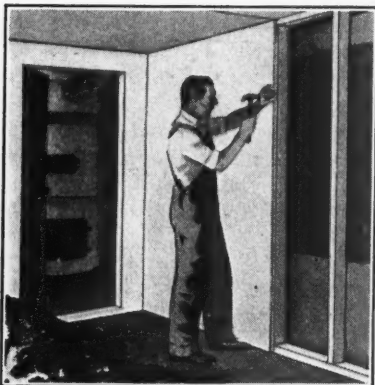
—smoother, stronger, more economical,



RESTAURANT BOOTHS: Douglas Fir Plywood is steadily increasing in popularity for jobs like these—because of its strength, ready workability, and low cost.



CLOSETS, CUPBOARDS, AND CABINETS: The neatness of Douglas Fir Plywood—as well as its size and freedom from splitting—makes it particularly useful for all kinds of built-ins and kitchen conveniences.



BASEMENT PARTITIONS: For fruit room, laundry, or dustless coal bin. No open joints or warping—if you use Douglas Fir Plywood.

Douglas Fir Plywood is also a permanent, warp-resisting lumber for wall panels, cabinets, fixtures and built-ins of all kinds.

AS concrete-form lumber, Douglas Fir Plywood has no equal—big sheets of strong, laminated wood, fast and easy to erect—with no crevices or joints to mar the surface of the finished job. Whether you use the thin panels of Douglas Fir Plywood as a liner only, or the heavy panels for both liner and form, you get the benefit of a flat, smooth finish which eliminates the necessity of rubbing or plastering.

Douglas Fir Plywood does not swell or shrink. It makes an absolutely tight form, retaining all the moisture in the concrete. Remember, too, that when you buy 1000 feet of Plywood you actually get 1000 surface feet. Compare this with 1000 feet of shiplap, which will cover only 800 surface feet.

Douglas Fir Plywood is also a money-saving material for permanent construction—partitions, sheathing, cabinets, cupboards and similar jobs—wherever big-size, lightweight, warp-resisting boards are needed.

The thinner dimensions of Plywood— $3/16"$, $1/4"$, $3/8"$ —offer you superior, attractive panels for ceilings and walls—real lumber with natural grain, in sizes up to four feet wide and eight feet long, at prices no greater than those of fibre composition boards.

Douglas Fir Plywood works easily with ordinary tools, will not split or splinter, and takes any wood finish. Up-to-date lumber dealers stock it, in various sizes and thicknesses. Mail coupon on opposite page for free sample and additional facts.



Wood Panels Big as Wallboard—Non-bulging—Non-leaking

Erection of Douglas Fir Plywood forms for the Hill Military Academy, Portland, Oregon. Notice the simplicity of large-unit construction. After the pouring and setting, these panels may quickly be dismantled and reused.

and LINING combined... more salvagable!

Approximately 300,000 square feet of $\frac{1}{4}$ " Douglas Fir Plywood was used for the concrete form liners of this magnificent new stadium in Cleveland.



Plywood a Perfect Backing for Reverse-molds

Because it holds nails and screws without splitting, Douglas Fir Plywood can be used for all kinds of pattern and reverse-mold jobs.

"Saves 10 per cent Labor Over Shiplap Forms"

Douglas Fir Plywood gives you larger units of lumber to work with — at fully ten percent saving in carpentry costs. Moreover, if properly handled, Plywood can be reused 4 to 8 times. When no longer suitable for forms it is ideally suited for wall and sub-floor sheathing on frame buildings, where its saving in the labor of installation amounts to 60%.

Douglas Fir Plywood is cut from the finest giant timber, and laminated with

water-resistant glue under hydraulic pressure. It is made in thicknesses from $\frac{3}{16}$ " 3-ply to $1\frac{3}{16}$ " 7-ply, and in various convenient sizes up to 4 feet wide and 8 feet long.

Write for free instructions on the proper use of Douglas Fir Plywood for concrete forms. The coupon will bring them to you, together with a free sample of Plywood and a copy of the Plywood Construction Bulletin. Mail today.



Big Panels of Real Lumber, Cross-Grained to Resist Warping

DOUGLAS FIR PLYWOOD



Douglas Fir Plywood Mfrs., 931-A,
Sixth Floor, Skinner Building, Seattle, Wash.

Gentlemen: Please send me a free sample of Douglas Fir Plywood, and plans for profitable plywood built-ins.

Name _____

Address _____

City _____ State _____

Check here if you are a Carpenter ☐, Retailer ☐, Realtor ☐, Architect ☐, or Contractor ☐, and additional material will be sent you.

President's Conference Committees Announced

SECRETARY OF COMMERCE LAMONT has recently announced the names of the chairmen of the various committees which are studying the problems of home building and home ownership and will report their findings to the President's Conference on Home Building and Home Ownership to be held in November.

The first committees deal with residential districts on the setting for the home. Frederick A. Delano of Washington has organized the Committee on City Planning and Zoning; Harland Bartholomew of St. Louis, the Committee on Subdivision Layout; Mrs. Junius S. Morgan of Princeton, New Jersey, the Committee on Landscape Planning and Planting; and Morris Knowles of Pittsburgh the Committee on Utilities for Houses.

The problems of home financing with special reference to the problems of second mortgages and foreclosures is under the chairmanship of Frederick H. Ecker of New York City. Home ownership and leasing is being studied by a committee under the direction of Ernest T. Trigg of Philadelphia. Problems of taxation in relation to housing have been assigned to a committee under the direction of Professor T. S. Adams of Yale University.

The acute problems involved in blighted areas and slums of our cities are being studied by a committee under the direction of Abram Garfield of Cleveland, Ohio, while the reconditioning, remodelling and modernizing of the individual house is being studied under the direction of Frederick M. Feiker of New York and Washington.

House construction has been assigned to a committee under the direction of A. P. Greensfelder of St. Louis, and William Stanley Parker of Boston is chairman of the Committee on Design. John Ihlder of Pittsburgh is chairman of the committee which is studying the relative merits of different types of dwellings.

The Committee on Fundamental Equipment for homes which deals with problems of heating, lighting, ventilation, plumbing, refrigeration, etc., is under the direction of Professor Collins P. Bliss, head of the Department of Mechanical Engineering of New York University. Standards for kitchens, laundries and other work centers are being drawn by a committee of which Miss Abby Marlatt, head of the Department of Home Economics of the University of Wisconsin, is chairman. Household management is the subject assigned to a committee headed by Miss Effie Raitt,

head of the Department of Home Economics of Washington State University. The committee on Homemaking is working under the chairmanship of Miss Martha Van Rensselaer, director of the New York State College of Home Economics at Cornell University. Home furnishing and decoration is being studied by a committee headed by Miss Ruth Lyle Sparks, president of the Interior Decorators Club of New York City.

The special problems of farm and village housing have been assigned to a large committee under the direction of Dean A. R. Mann of Cornell University. Negro housing has been assigned to a committee of leading negro citizens interested in one aspect or another of housing under the direction of Miss Nannie Burroughs of Washington, D. C.

The possibility of providing local centers for information and advice on home building and homemaking is being studied by the committee on Home Information Centers under the chairmanship of Miss Pearl Chase of Santa Barbara, California. The relation of income and the home has been assigned to a committee headed by Professor Niles Carpenter of the University of Buffalo. The organization and management of large scale operations in housing is being dealt with by a committee of which Mr. Alfred K. Stern of Chicago is chairman.

Revere Makes Appointment

REVERE Copper and Brass, Inc., 230 Park Ave., New York City, has announced the appointment of C. A. Macfie as assistant sales manager, with headquarters in the general sales department of the company in New York City. Mr. Macfie has been connected with the Revere organization

for some time, recently serving as manager of merchandise sales in the New York District.

New Chicago Postoffice Contract Awarded

ACTUAL work on the new Chicago postoffice will be under way the first week in September, according to George Griffiths, of John Griffiths & Son, Chicago, contractors. The main construction contract for the new postoffice has just been awarded to the Griffiths organization company. The contractors plan to complete the main building by November, 1932, and have the whole structure finished and turned over to the government within less than two years.

In announcing award of the construction contracts, the treasury revealed that the total contract cost of the building, which will be the world's largest postoffice, will be just under \$16,000,000.

The main structure award went to Griffiths for \$13,459,970. The Westinghouse Electric Elevator company of Chicago was given the contract to install the elevator plant, the price being \$739,500. The mail handling equipment award went to the Lamson Company, Inc., Syracuse, N. Y., for \$1,760,077. The total for all three contracts was \$15,959,547.

Award of the contract will prove a boon not only to Chicago workmen but employes and industries which will furnish the materials. The contractors estimated that probably as many as 14,000 men would be given work. Mr. Griffiths said as many as 3,500 would be employed on the main structure when the work-load reached its peak. Another 10,000 to 12,000, he said, will obtain work at the plants furnishing materials.

IT IS REPORTED THAT —

Sales of life insurance, during 1930, exceeded by \$1,100,000,000 the average for the five preceding years and fell below the record-breaking year of 1929 by less than four per cent.

The U. S. Treasury Department has ruled against the admission of Russian convict-made lumber to the United States.

Leading manufacturers in the oil burner industry are unanimous in predicting that 1931 will be the biggest year in the history of their industry.

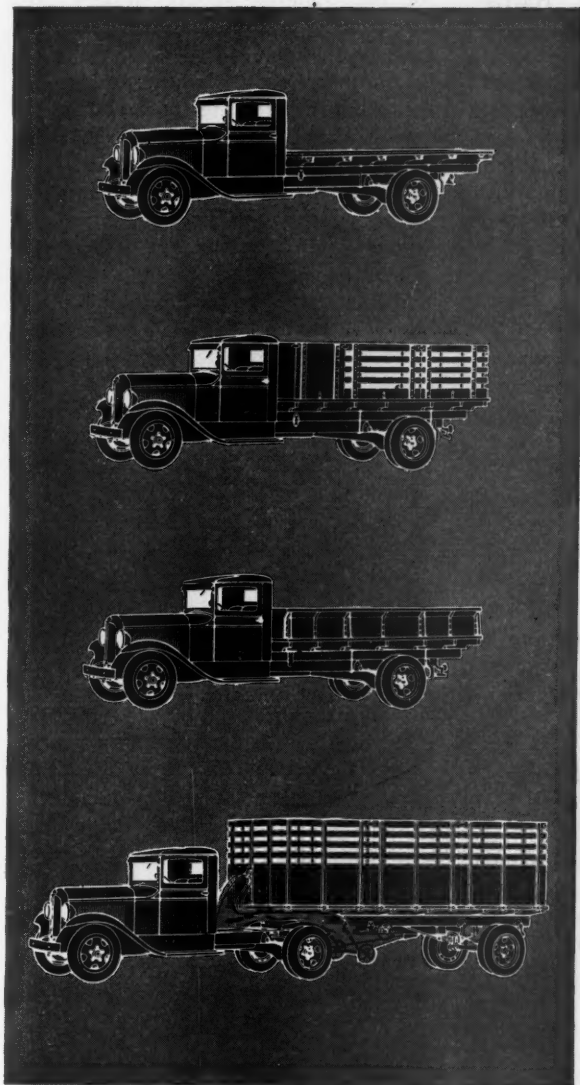
Modernizing campaign, in a town of 5,000, last year, produced 65 modernizing jobs while but two new

houses were built and resulted in a satisfactory building volume where a shut-down would otherwise have been necessary.

Industrial research work, done by more than 600 concerns, requires an annual expenditure of \$75,000,000, and an additional \$25,000,000 annually is spent for research by various associations and bureaus.

The first stretch of rubber road in America was laid recently on the approach to the new \$500,000 bridge across the Passaic River, at Passaic, 400 square yards of rubber in diamond shaped blocks about one inch thick being used.

Biggest, Strongest, Longest Lasting truck in the lowest price class



Comparative specifications prove the new SPEED WAGON is bigger, has stronger parts, more bearings, better lubrication and finer materials, proving in advance its longer life! As a matter of record, no other truck costing up to *double* the SPEED WAGON price has equal specifications!

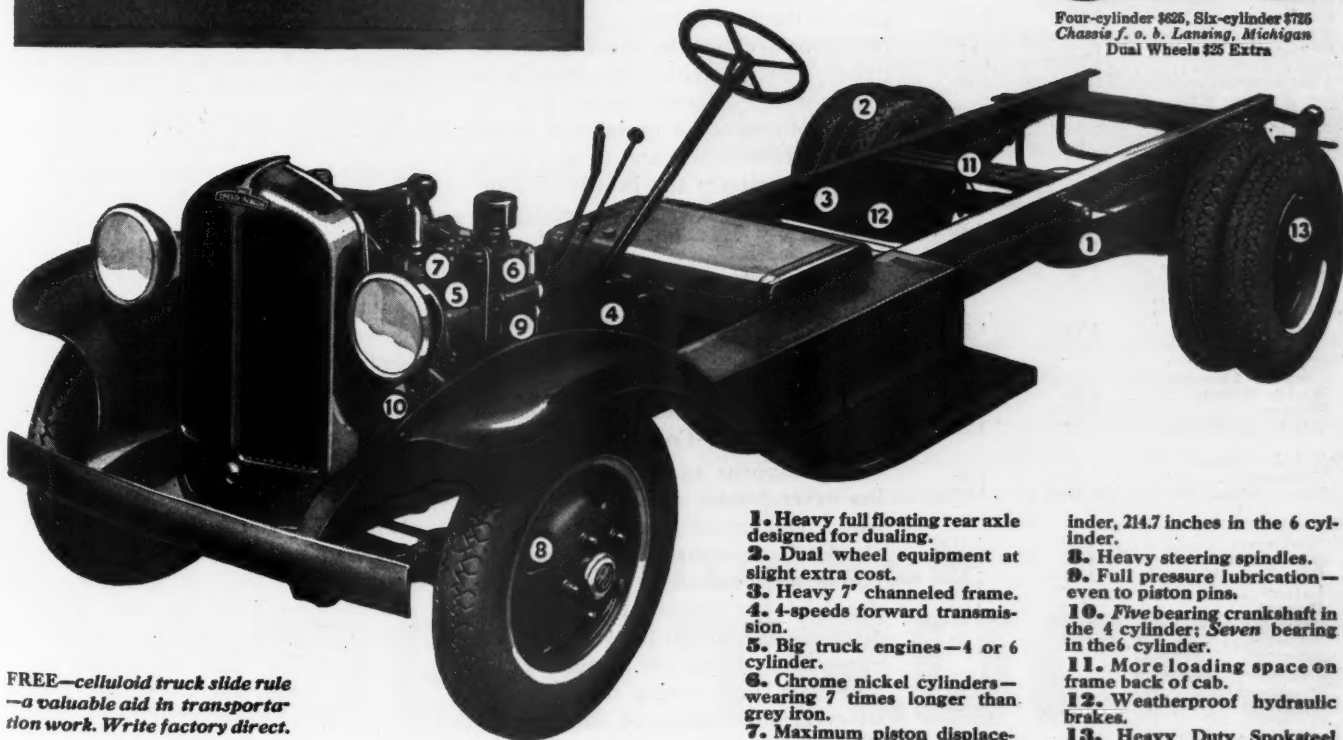
Reo-made bodies, suiting the haulage requirements of the Building Industry, are engineered to the chassis, matched and mounted at the Reo factory. For further information call your Reo dealer, or write

REO MOTOR CAR COMPANY, LANSING · TORONTO

THE NEW 1½ TON

REO SPEED WAGON \$625

Four-cylinder \$625, Six-cylinder \$725
Chassis f. o. b. Lansing, Michigan
Dual Wheels \$25 Extra



FREE—celluloid truck slide rule
—a valuable aid in transportation work. Write factory direct.

1. Heavy full floating rear axle designed for dualing.
2. Dual wheel equipment at slight extra cost.
3. Heavy 7" channel frame.
4. 4-speeds forward transmission.
5. Big truck engines—4 or 6 cylinder.
6. Chrome nickel cylinders—wearing 7 times longer than grey iron.
7. Maximum piston displacements—205 inches in the 4 cyl-

- inder, 214.7 inches in the 6 cylinder.
8. Heavy steering spindles.
9. Full pressure lubrication—even to piston pins.
10. Five bearing crankshaft in the 4 cylinder; Seven bearing in the 6 cylinder.
11. More loading space on frame back of cab.
12. Weatherproof hydraulic brakes.
13. Heavy Duty Spoksteel wheels.

Cities Report Building Wage Reductions

THE Builder's Association of Chicago has completed its collection of wage scale data prior to the issuance of the 1931 national wage scale in published form and which covers hourly building trades wages in 150 principal cities of the United States and Canada. In many cities, lower hourly rates for certain building trades are now being paid in comparison with a year ago. A comparison is shown of several of the larger cities where reductions in certain building trades have taken place under the 1930 prevailing rates:

City	Trade	1930 rate	1931 rate
Atlantic City—			
	Hod Carriers	\$1.25	\$.50 to 1.12½
	Plumbers	1.50	1.25
	Steamfitters	1.50	1.25
	Stone Cutters	1.75	1.50
	Mosaic Setters	1.62½	1.50
Baltimore—			
	Hoisting Engineers	1.50	1.37½
	Struct. Iron Workers	1.65	1.50
	Painters	1.50	.90
Boston—			
	Stone Cutters	1.50	1.37½
Buffalo—			
	Stone Cutters	1.50	1.25
Cincinnati—			
	Elevator Constructors	1.46½	1.32½
Denver—			
	Bricklayers	1.62½	1.50
	Orn. Iron Workers	1.37½	1.25
	Struct. Iron Workers	1.37½	1.25
Detroit—			
	Asbestos Workers	1.25	1.15
	Bricklayers	1.57½	1.25 to 1.50
	Carpenters	1.25	.80
	Cement Finishers	1.00	.70 to .90
	Lathers	1.50	1.00 to 1.25
	Plasterers	1.62½	1.37½
Indianapolis—			
	Sheet Metal Workers	1.27½	1.22½
Louisville—			
	Carpenters	1.12½	1.00
	Glaziers	1.25	.75
	Hod Carriers90	.65
Memphis—			
	Glaziers	2.00	1.12½
	Struct. Iron Workers	1.55	1.25
	Orn. Iron Workers	1.55	1.25
	Metal Lathers	1.37½	1.25
	Plasterers	1.62½	1.25
Milwaukee—			
	Gas Fitters	1.18¾	1.06¾
	Common Laborers75	.65
Minneapolis—			
	Lathers	1.25	1.00
New Orleans—			
	Bricklayers	1.50	1.00
	Plasterers	1.50	1.25
	Plumbers	1.25	1.00
New York—			
	Metal Lathers	1.92½	1.65
Portland, Oregon—			
	Common Laborers75	.50
	Marble Setters	1.50	1.25
	Painters	1.22½	1.10
	Tile-Mosaic Setters	1.37½	1.25
Salt Lake City—			
	Plasterers	1.37½	1.20
	Stone Cutters	1.37½	1.20
Tacoma—			
	Bricklayers	1.50	1.37½
	Struct. Iron Workers	1.25	1.00
	Orn. Iron Workers	1.12½	1.00
	Lathers	1.37½	1.25
	Painters	1.12½	1.00
	Sheet Metal Workers	1.19	1.06¾
	Steamfitters	1.25	1.00
Toledo—			
	Bricklayers	1.62½	1.50
	Plasterers	1.62½	1.50

There have been reductions in cer-

tain building trades in the smaller cities in comparing 1930 rates with those of 1931. These wage reductions include such cities as Akron, Beaumont, Birmingham, Butte, Chattanooga, Columbus, Dallas, Danville, Decatur, Erie, Grand Falls, Harrisburg, Houston, Lincoln, Lynn, Madison, New Bedford, Norfolk, Peoria, Reading, Reno, Rochester, Rockford, Rock Island, Scranton, Shreveport, Sioux City, Springfield, Ill., Springfield, Mass., Topeka, Tucson, Wichita and Wilmington, and Duluth. With few exceptions, all of these cities operate on the closed shop basis.

To Distribute Fireplace

THE Kerner Incinerator Company, Milwaukee, Wis., has taken over the national distribution of the Bennett fireplace, manufactured by the Bennett Heater Co., Inc., Norwich, N. Y., and also the Andelco light-proof shade which is used in auditoriums, operating rooms, x-ray and dark rooms and similar places where absolute darkness is required.

The Bennett fireplace is a complete unit which converts the ordinary fireplace to a useful heating and ventilating device.

Ransome Acquires Transit

THE Ransome Concrete Machinery Company, Dunellen, N. J., has acquired a controlling interest in Transit Mixers, Inc., and will, hereafter, manufacture for that company, at its Dunellen plant, the Transit mixer.

There will be no change in the position or policy of the Ransome company in the field it now occupies. The two companies will be operated as distinctly separate units. The purpose in acquiring the Transit mixer was to find employment for capital and facilities in this new field and to give users of Transit mixers the benefit of Ransome quality, efficiency and service.

Contractors Buying Direct

Editor, AMERICAN BUILDER & BUILDING AGE:

Editorial in the June issue of AMERICAN BUILDER AND BUILDING AGE on the subject of Dealer-Contractor Relations.

This happens to be a question that has several sides to it, and we have had a number of cases where it was absolutely necessary for the dealer to go into the contracting business in order to protect himself against the contractor who thought he was the whole works, and should buy all his material wholesale, thus cutting the dealer out of everything connected with the bill. There are too many manufacturers

who solicit contractor business direct, and a very considerable number of irregular sources of supply that cater largely to the contractor business. If this particular practice continues to grow it is going to force the larger of the building supply dealers into the contracting business as a matter of self protection.

Another reason why the dealer goes into the contracting business is because the contractor is perhaps his only contact with the public, and soon gets the idea that he can dictate the price which he is willing to pay for material, and usually operates on the dealer's money.

Understand, we are talking about the general run of so-called contractors, and not the comparatively few large building construction companies who are properly financed and know how to run their business. I doubt if, in Nebraska, there are more than fifty towns that have mechanics who should be called contractors. They are nearly all under-financed and depend largely on the dealer for all that part of their operation, then expect him to meet all the low, wild cat prices that they are able to dig up.

Whenever the contractors, as a whole, recognize the fact that they are only a part of the building construction game, and concede to the dealer a right to make a reasonable profit for the service he performs, the chances are that this particular thing you are talking about in this editorial will iron itself out. There are a great many communities where the relationship between the contractor and the dealer are very satisfactory, where both appreciate the work of the other, but to write a general broadside against the dealer contracting covers too much territory and does not take into account the conditions as they exist in a great many communities.

We are not in favor of a dealer going into the contracting business, from principle, but too many times that is the only way that he has to get a chance to distribute material which normally would be his only business. Contracting in a small way is very poorly organized, and a great many of them seem to think the best contractor is the fellow who can make the lowest price. Until such time as the contractors of the country get a better organization among themselves, and set up something in the way of a standard by which contractors shall be judged, I see no way out, in a good many cases, but for the dealer to protect himself in the only way he has left.

Harry E. Dole, Secretary-Manager,
NEBRASKA LUMBER MERCHANT'S ASSOCIATION,
Lincoln, Nebraska.

Earning ability!

THAT'S THE FINAL TEST OF TRUCK VALUE



After all, the final test of a truck's value is its earning ability. Dodge Trucks not only earn—they earn more, for several very definite reasons. » » Typical of Dodge value is the Standard 1½-ton chassis. Its price—only \$595 f. o. b. Detroit—calls for but a small investment. Then, because of this truck's many exceptional features, you get greater dependability, ample power, ease of control, speed, safety, economy and long life—all an assurance of maximum earning ability. » » Inspect and test this 1½-ton truck or any of the many other Standard or Heavy-Duty types in the Dodge line. You will find that the experience gained in building over 400,000 quality Dodge

Trucks assures you a truck that is precision-built and perfectly balanced part-to-part—a truck that will work and earn for you every mile of its long life.

PAYLOAD CAPACITIES IN THE HEAVY-DUTY LINE RANGE FROM 3,600 TO 11,375 POUNDS—AND UP, FOR TRACTOR AND TRAILER SERVICE. PRICES ARE EXCEPTIONALLY LOW. — THE STANDARD LINE RANGES IN PAYLOAD CAPACITY FROM 1,200 TO 4,300 POUNDS AND INCLUDES THE 1½-TON CHASSIS AT **\$595** F. O. B. DETROIT

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WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

The Builder's Library

Equipment for Buildings

Steel Laundry Hampers

"Meeting Modern Demand," is the title of a booklet offered by the Felco Mfg. Co., 30 Orange St., Bloomfield, N. J., describing its Felco In-A-Wall laundry hampers of steel, finished to match decorations and built into the wall.

Door Hangers

The Richards-Wilcox Mfg. Co., Aurora, Ill., has just issued a new folder on its line of EaR-Way tracks for hanging large doors.

Aluminum Chairs

The Aluminum Company of America, Pittsburgh, Pa., has recently issued a handsome new catalog illustrating its new line of aluminum chairs specially designed for use in hotels, restaurants, cafeterias, clubs, schools, libraries and homes.

Heating Boilers

A new Arco boiler, with an Arco circulator, recently brought out by the American Radiator Company, 40 W. 40th St., New York City, is described and illustrated in color, in a new booklet offered by this company.

Faucets and Clotheswashers

A folder issued by the Kohler Company, Kohler, Wis., is devoted to a new kitchen faucet with gooseneck spout which affords a 12 inch clearance from the sink bottom. A second folder illustrates and describes the new Kohler clotheswasher.

Contractors' Equipment

Electric Arc Welding

The Lincoln Electric Co., Cleveland, Ohio, has prepared a series of sheets for loose leaf binding on "Studies in Structural Arc Welding." Plate 25 of this series has just been released and deals with "Arc-Welded Mill Buildings."

Woodworking Machines

An illustrated folder has been prepared by the American Floor Surfacing Machine Company, 545 S. St. Clair St., Toledo, Ohio, showing how large buildings can materially reduce maintenance costs with this company's Electric Carpenter.

Offered by Book Publishers

"Estimating Building Costs"

This is the third edition of the well known estimating book, by Frank E. Barnes, C. E., the first edition of which was published under the title, "Estimating Building Costs and Appraising Buildings." It has been completely revised to bring it up to date in line with changes and improve-

ments of recent years. Published by the McGraw-Hill Book Co. Inc., 370 Seventh Ave., New York City. Price \$5.00.

"1931 American Civic Annual"

This volume records outstanding civic achievements of American communities during the past year and offers suggestions for the improvement of living conditions in this country. Published by the American Civic Association, 901-903 Union Trust Bldg., Washington, D. C. Price \$3.00.

Construction Materials

Cedar Shingles and Shakes

Two new booklets have been published by the Weatherbest Stained Shingle Co., Inc., North Tonawanda, N. Y. "Making Old Houses into Charming Homes" presents the possibilities of remodeling with stained shingles, while "Weatherbest Old Colony Genuine Hand Rived Tapered Red Cedar Shakes" is devoted to the possibilities of this novel exterior finish.

House Insulation

The Johns-Manville Corporation, 292 Madison Ave., New York City, has published a brochure on the use of its insulation material under the title "Now you Can Blow Year 'Round Comfort Into Your Home."

The Use of Wallboard

Broad possibilities in the use of wallboard are described and illustrated in a new booklet published by The Upson Company, Lockport, N. Y.

Exterior Stucco

A pamphlet on "Oriental Exterior Stucco" is offered by the United States Gypsum Company, 300 W. Adams St., Chicago.

Monel Metal Design

"Practical Design in Monel Metal—for Architectural and Decorative Purposes" is the title of a manual for architects and metal craftsmen defining the decorative uses and limitations of Monel metal and presenting a technic for developing those uses in the most practical and economical manner. It is published by The International Nickel Company, 67 Wall St., New York City.

Fireproof Insulation

The Thermax Corporation, 228 N. La Salle St., Chicago, offers two new booklets, one of small size explaining the uses and application of Thermax, the other, for A.I.A. filing, containing specifications and technical data.

Insulation and Roofing

The Johns-Manville Corporation, 292 Madison Ave., New York City, has recently published two booklets in its Architectural Service series. One on "Insulating Board" and the other on "Salem Roofs." This series contains complete details of application of the various products and also complete specifications.

"Useful Information About Lead"

The Lead Industries Association, 420 Lexington Ave., New York City, has published a book under this title which contains concise information on the various uses of lead with a chapter devoted to each of the major industries, price 50 cents.

Insulation

A small folder dealing with the application of In-Cel-Wood, a fiberboard insulating material, is offered by the manufacturers, the Cornell Wood Products Company, 307 N. Michigan Ave., Chicago.

Columns and Porch Work

Samson columns and porch work, manufactured by the Washington Manufacturing Company, Tacoma, Wash., are described and illustrated in a new catalog, of filing size, which is now being distributed.

Wood Preservatives

"Bruce Preservatives" are covered in a technical report on the protection of wood against rot and wood-eating insects, which has been published by the E. L. Bruce Company, Memphis, Tenn.

Miscellaneous Publications

Sanitary Drinking Fountains

"Sanitary Drinking Facilities—with Special Reference to Drinking Fountains," is the title of Bulletin of the Women's Bureau, No. 87, U. S. Department of Labor. Obtainable from the Government printing Office, Washington, D. C. Price 10 cents.

Floor Finishing Profits

The American Floor Surfacing Machine Company, 545 S. St. Clair St., Toledo, Ohio, is offering a new booklet of information entitled "The American Method of Floor Finishing," for contractors and builders who want to make extra profits even in dull seasons, by adding floor surfacing, waxing, and polishing service.



DRIVE Rico Flooring Nails as fast as you like. Pound them at top speed into the hardest wood. Rico Flooring Nails won't break. They won't bend or split. These are HARD nails for HARD floors!

Rico Flooring Nails are specially hardened and tempered to take the grief out of floor-laying. They are cut from solid plate—cut with a four-sided, wedge shape that gives them 72% greater holding power than round nails.

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A home insulated with U. S. Mineral Wool is completely protected as long as the building lasts.

The discomfort of a warm home in summer or a cold one in winter is overcome and fire hazard reduced.

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"Building and Loan" Convention Report

(Continued from page 77)

of the United States Building and Loan League are prepared and able to furnish all funds required for homes but feel that the surplus holdings of mortgage institutions must be sold to home owners before further construction of homes is justified and that any plan that would put the government in competition with the building and loan associations is decried.

This resolution was voted down.

A second resolution was offered, authorizing the president of the U. S. Building and Loan League to appoint a committee of five to study the several proposals mentioned for increasing the mobility of credit among the various associations of the country and to report on the feasibility of the proposals at a later meeting of the League.

This resolution was tabled.

Meyers Counsels Caution

The consensus of opinion at the Building and Loan Convention can probably best be expressed in the words of R. Holtby Meyers of Los Angeles, California, the retiring president, who earlier in the convention had said: "Before approving or expressing any final judgment on the proposal to establish a new federal credit system for home financing, I urge that the subject be given most careful consideration. We know that national banks fail and that joint stock farm loan banks have experienced heavy losses. If this new type of rediscounting system were organized it is quite certain that a volume of local money would be directed into communities far removed from, and to the disadvantage of, our local building and loan associations."

Apparently, however, there still remains in the U. S. Building and Loan League a strong element who wish further study of some plan whereby mortgage paper can be made more liquid and mobile. Opinion favorable to the study of some such plan was expressed by a number of leaders at the convention. For example, Philip Lieber of Shreveport, Louisiana, who spoke on "Financing Our National Organization," stated emphatically that he would welcome some federal bank scheme that would put an end to the uncertainty prevailing in the field, standardize building and loan operations in the country and which would permit associations that so desired to sponsor federal incorporation of building and loan associations. Some federal regulatory and supervisory institution would be a great thing in his opinion and he did not agree that federal legislation would be pernicious. People run to place their money in federal securities, he pointed out, and there are very few weaknesses in federal bonds now. He hoped that the U. S. Building and Loan League would seize the opportunity to sponsor such legislation.

Denies Emergency Exists

Other opinions were expressed in favor of studying the proposal to establish a Federal Home Loan Bank but it seemed that I. Friedlander of Houston, Texas, expressed the sentiments of many delegates when he said: "I do not feel that an emergency exists in the way of a shortage of home financing in the United States. There is a shortage of financing for sales of real estate, however, and realtors would like to have more funds to handle real estate sales. There is also a shortage to pay for withdrawals. A great deal of the trouble of the nation today is due to overcredit. It is an indictment of

over-financing that there are elements today who still want to build even more office buildings and apartment houses. Money is being offered at 1½ per cent for stock speculation. I do not believe in a credit system that calls for the hypothecating of mortgages in the sale of bonds. Why can't building and loan associations tie in with the already existing Federal Reserve system, then the sale of bonds would not be necessary?

"It should not be made easier to acquire a home," Mr. Friedlander declared, "it has been made too easy. That is the trouble. Let the home seeker be ready to put in 40 to 50 per cent equity of his own and he will find plenty of money available for the rest."

For and Against Second Mortgages

Opinions were expressed both for and against second mortgages at the Centennial Convention, and discussion on this subject was one example of the divergence of views among delegates.

Dr. William D. Gordon, Secretary of Banking in the State of Pennsylvania, and J. Willson Smith, a real estate banker of Philadelphia, expressed opinions favorable to the granting of second mortgages by Building and Loan Associations on the ground that such associations provide an indispensable service to deserving and reputable home seekers who would be unable to secure homes were it not for the possibility of obtaining second mortgage money at reasonable rates of interest. Where bad results had followed the granting of second mortgages by building and loan associations, it was because of faulty loaning operations on the part of the association that applied also to their first mortgages as well, these men contended, and there was nothing inherently wrong with the principle of granting junior financing. This opinion was not shared by all the delegates, however.

Need for Supervision

"The lenders of mortgage money are to be blamed for the credit situation," declared Robert J. Nash of Narberth, Pennsylvania. "They could have stopped the extension of reckless credit. In the future, proper construction supervision should be a provision of mortgage lending. Mortgage loans should be refused for building for which there is no future or immediate demand because such building will depress the value of existing structures. This applies to home building, too. The present situation is due to the fact that mortgage lenders have loaned money on useless structures. Real estate financing has been too easy.

"Faulty planning as well as overbuilding must be eliminated," said Mr. Nash. "Much of the cheap and hasty construction in suburban districts has resulted in headache and heartache for the home buyer and has turned many into permanent renters. I know of no agency that can accomplish as much to bring about good construction as can the mortgagee. Make good construction a condition of every mortgage loan.

"The mortgage lender can make a substantial contribution to civic improvement and at the same time improve his own security by requiring beauty in construction. The commercial value of beauty has been overlooked. All value largely depends on demand and the attractive property is the salable property."

Editor of "Business Week" Calls for Easier Credit

"Since the medium of exchange in all civilized nations is money and credit, probably that is where to look for the source of our troubles," Marc Rose, Editor of *Business Week*,

(Continued to page 98)

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The Saturday
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Good House-
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perfect performance
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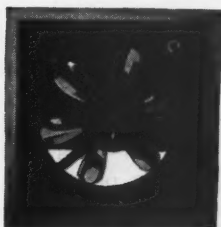
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Single Chain Control

One operation starts or stops the Victor Port-Air Ventilator. When the chain is released, the outside shutter opens and

this in turn controls the switch that starts the fan. By pulling the chain to close the shutter—the current is broken and the fan stops. Simple to operate and very easy to install. Comes already mounted in steel wall box ready for installation in wall of any thickness.



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¶ A surface that cannot become smooth and slippery underfoot—

¶ Carborundum Grain, being sharp, gives a definite gripping effect—because of its remarkable hardness it adds years to the life of the surface.

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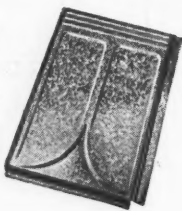


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BEAUTY need not be expensive . . . Edwards Metal Spanish Tile offers gorgeous roofing effects . . . row upon row of graceful, undulating curves, massive and beautiful. Edwards Metal Shingles of ornate or simple design sweep in symmetrical lines across the expanse of roof. Far or near . . . Edwards tile or shingle roofs are always a treat to the eye and a treat to the check book.

No special roof structure is required for Edwards Metal Spanish Tile or Shingles. They have all the massive beauty of clay tile or slate at a fraction of the weight and cost. Easy to apply. Joints interlock assuring perfect alignment and leak-tite protection.

Made in Galvanized Steel, terne plate (tin) sheet zinc or pure copper. Proof against fire, lightning, wind and weather. Reduce upkeep and insurance.



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Beautiful interior decorative treatment, easily applied. Heavy metal, deeply embossed with beautiful period and modern designs. Ideal for homes, in basements, attics, kitchens, etc., for Halls, Theatres, Hospitals, Stores, Hotels, etc. Fire-proof, sanitary, economical, beautiful. Write for illustrated catalogue showing installations in all parts of the world.



Complete working instructions furnished from your measurements. Get our proposition.

THE EDWARDS MANUFACTURING CO.

542-562 Eggleston Ave., Cincinnati, Ohio

World's largest manufacturers of sheet metal building materials

"Building and Loan" Convention

(Continued from page 96)

ness Week, said to the convention of building and loan delegates. "For the first time, in all the history of the modern world, here is a civilized nation that has more than a dollar's worth of gold for every dollar in circulation.

"The total deposits in American banks are some 57 billions of dollars and people are hoarding money shamefully.

"Today we are in control of the deflationists. A deflationist is one who believes it is good for us to bump along on flat tires. What is more, he will help supply the broken glass. You have heard the argument—everything has been inflated. Everything must come down. Prices, rents, wages. Then business will pick up again. I have no objection to this, if it is pushed through to its logical conclusion. I will work for a dollar a day, if you will sell me shoes for 10c a pair and *everything else in proportion*. But *everything else* includes my debts, and your debts and city debts and state debts and national debts and international debts.

"Deflation brings not merely low prices but chokes the stream of business altogether. The men who insist the hardest and the loudest that we must cure inflation, must get over our foolish, high ideas, must get back to pre-war levels—these gentlemen are for the most part the men who *own* things; they are not, mostly, the men who *do* things. They are not the business management type. They are the land and mortgage holders, money lending group. Cut prices and wages, of course—but debts—they're scared! They can't be cut. To which the answer seems to be: 'Oh, Yeah?'

"The solution is a managed money and banking system. I shall not suggest the details. But we are foolish to let our system manage us, instead of managing the system. When money becomes too scarce, too costly in terms of goods, money should be made less scarce, less valuable, so that prices will rise. There is no serious dispute as to whether this can be done, but there is bitter dispute as to whether it should be done because this is inflation and the word has come to have a nasty sound. Many authorities assert it cannot be controlled, but we believe it can be. And I believe that today we would be trying the plan, right here in the United States, were our Federal Reserve not so completely in the control of the member banks with all their conservatism, and their inherited blind faith in a system that ever and again traps the world and makes it suffer."

Strengthening the National Organization

Plans to strengthen the national organization of building and loan associations were presented at the Centennial Convention and this was one of the important features of the assembly from the standpoint of building and loan men. The necessity of fighting in state and national legislative halls for laws that will help and not hinder building and loan operations is so great, it was contended, that every state in the country should incorporate its building and loan associations into the national organization. Taxation against building and loan interests was held to be the greatest evil and strenuous efforts will be made to cut this off in the coming months.

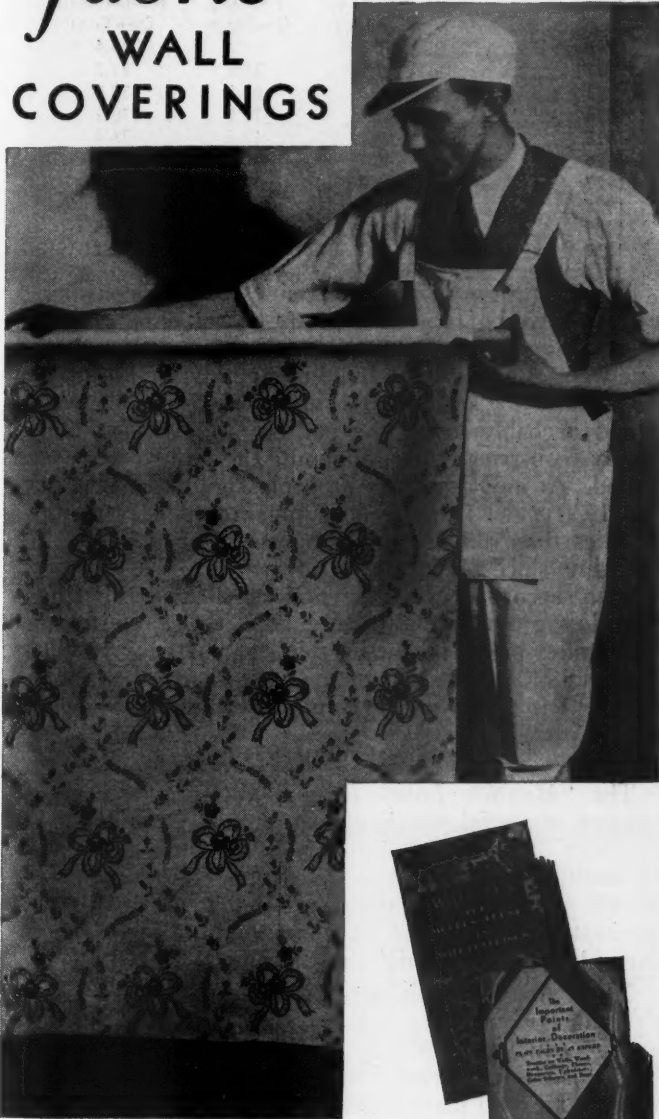
The convention closed with the election of William E. Best of Pittsburgh to the presidency. Ward B. Whitlock of Springfield, Illinois, is the new first vice-president and Philip Lieber of Shreveport, Louisiana, is the newly chosen second vice-president. Herman F. Cellarius of Cincinnati, Ohio, was re-elected secretary-treasurer, a position which he has held for many years.

New Talking Points

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fabric

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TELL your customers about Wall-Tex. Everyone who intends to build or buy a home is keenly interested in the many advantages of this beautiful, durable *fabric* wall covering.

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Today!

Wall-Tex has many big sales features that your customers will quickly notice. The patterns are refreshingly new. Many of the colorings are in beautiful pastel shades. And *fabric texture* is one of the outstanding features of Wall-Tex beauty. It makes the walls look richer. And they possess greater strength when reinforced with this tough fabric. It protects against plaster cracks — and resists scuffing and marring. The surface is waterproof — easily cleaned with a damp cloth or mild soap and water. Here is, truly, *enduring beauty* — at a cost that is very moderate.

Send your name and address on the margin of this page for newest Wall-Tex samples and interesting folders shown above.

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fabric wall coverings of enduring beauty

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Quiet Means Comfort

Comfort Sells Homes

Nowadays most people have learned how important quiet is to their health and comfort. They are looking for sound-proof offices, apartments, and homes, and the wise builder, like Mr. Ruttinger, is looking for the most economical and effective sound-proofing he can find.

Cabot's Quilt is the answer. It is low in price, flexible and easily installed (made in a special 18 inch width which fits between studs or rafters without cutting). Because the material of which it is composed is a marine plant, it is root-proof, vermin-proof, fire-resistant and will never pack down or otherwise lose insulating power.

Mail the coupon below for full details.



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Cabot's

Heat-Insulating,
Sound-Deadening

"Quilt"



Made by the makers of the famous Cabot's Stains
and Cabot's Collopakes, for use instead of paint.

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Inc.

Please send me your Laboratory Bulletin No. 5 on Sound Deadening and your Quilt Book, Build Warm Houses.

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\$447.68 IN ONE MONTH with the American Method

G. E. Turcott of Missa, writes: "Floor Surfacing with American Method is paying big. Does work of 6 men. I took in \$447.68 last month." C. H. Jimison of W. Va., averaged \$25 to \$40 a day. "I took in 30 days to completely refinish a building. We supply FREE advertising cards, folders to help you get started. Ask about the American Method. No obligation."

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C. C. Field of Montana averaged that much. Wilmington Manor Builders, of Delaware, say: "Our Electric Carpenter has twice over paid for itself." Wise contractors everywhere use it now to earn extra profits making storm sash, porch enclosures, cabinet work, alterations. Carpenters start in business for themselves making furniture, novelties, toys, repairs. Ask for list of "500 Things to Make with the Electric Carpenter" and how to get plans, blueprints, etc.

Ask about the Greyhound Sliding Swing Saw. Saves its own cost on the first job. For Builders, Contractors, Lumber Yards, etc.

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A Complete Carpenter Shop
8" Rip Saw
8" Circular Saw
14" Band Saw
36" Lath
10" Swing
8" Jointer
1/2" Hollow Chisel
Mortiser
Roughing Plane
Sander, Borer

A WHOLE YEAR TO PAY

Trends in Building Activity

(Continued from page 55)

construction. Here are some of the "Monthly Labor Review" figures:

Year	Per cent of families provided for in— 1-Family Dwellings	2-Family Dwellings	Multi-Family Dwellings
1921	58.3	17.3	24.4
1922	47.5	21.3	31.2
1923	45.8	21.2	33.0
1924	47.6	21.5	30.9
1925	46.0	17.6	36.4
1926	40.7	13.9	45.4
1927	38.3	13.4	48.3
1928	35.2	11.1	53.7
1929	40.2	11.4	48.5
1930	45.7	12.1	42.2

Although these 257 identical cities may be considered representative of the entire industry in most respects, we question whether the above percentages would hold true were all small town building activity included. The inclusion of the smaller cities and towns, in other words, would probably lower the per cent figures for multi-family construction throughout the entire ten year period. At any rate, it is probably significant that during 1930 new 1-family dwellings provided for more families than did new multi-family structures—for the first time since 1925.

Also, according to these figures, 2-family dwellings have lost ground rapidly since 1923, the actual number of families provided for by this class of new dwellings during 1930 being less than one-sixth of the number provided for by 2-family construction during 1923.

Five Leading Cities, 1921 to 1930

The "Monthly Labor Review" housing article also presents material which makes it easy to compare the statistics of total annual dollar volume, and the number of families provided for by residential construction (per 10,000 population) showing that the cities which report greatest dollar volume of construction do not necessarily lead in residential construction.

New York and Chicago, for instance, have claimed first and second place respectively in total expenditures every year from 1921 to 1930 inclusive. Detroit has held third place during five of these years; fourth place twice; and fifth place twice. Los Angeles claimed third place three different years; fourth place three times; and fifth place four times. Philadelphia was listed as third once (1929); held fourth place five times; held fifth place three times. Washington, D. C., earned a place among the five leading cities only once during the decade, in 1930, as the fifth city.

During this entire ten year period only one of the cities mentioned above could be classified among the five cities leading in residential construction for these years. Los Angeles held second place in residential construction for three years (1921-1922-1923); third place twice (1924, 1930); fifth place in 1925. Long Beach, California, held first place for five of the ten years, and was also listed for third place once, and fifth place once, during this period. Miami, Florida, held first place during 1924 and 1925, as well as third place in 1923 and fourth place in 1922. Among the other cities which held third, fourth or fifth place, the following were listed: Pasadena, Calif., Shreveport, La., Lakewood, Ohio, East Cleveland, Ohio, Irvington, N. J., San Diego, Calif., Tampa, Fla., Mt. Vernon, N. Y., White Plains, N. Y., Yonkers, N. Y., East Orange,

(Continued to page 102)



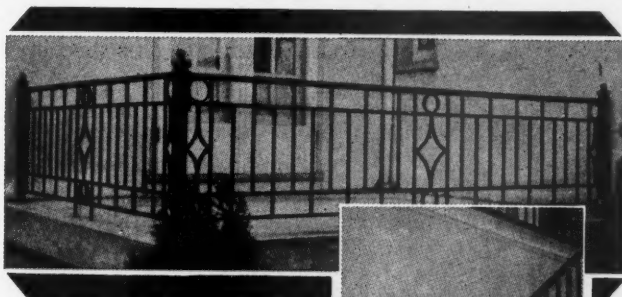
A WINDOW THAT PACKS A SALES WALLOP.

If you're looking for building features that pack a sales wallop with prospective customers just take a look at the new VENTO PREMIER. Prospects enthuse at the way it provides overhead ventilation at a touch of the locking bar; the ease with which it opens full from the bottom; locks or unlocks from the sill level; the quick, easy and cheap replaceability of broken panes; its solid, double-contact weather-tight construction, and many other exclusive features. And after all, because of its puttyless feature it actually costs less installed than most well-made basement windows.

If price is first consideration look over the VENTO CHALLENGER. In the low price field it's got everything licked to a standstill.

See these windows at your Lumber or Building Supply Dealer. Catalog on request

VENTO STEEL SASH CO.
Puttyless Windows for Basements, Garages, Factories, Barns, etc. MUSKEGON MICHIGAN



Wrought Iron Adds That Touch of Quality

When prospects inspect your houses, point with pride to the wrought iron balconies and stair-rails. These finishing touches add charm and value to any building.

Let us help you plan and design wrought iron fittings of personal charm.

Blueprints and estimates cheerfully given. Tell us your needs; all orders executed promptly. Our volume of business permits us to quote low prices. Write us today.

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**CINCINNATI
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2029 Spring Grove Ave.
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FRAMES

WEATHERPROOF WEDGE-JOINTS

- Found only in PINE CRAFT frames, wedge-joints effectively protect the completed home against drafts, dust and seeping moisture. PINE CRAFT frames are made with a double wedge-joint between pulley stile and blind stop . . . and a single wedge-joint between blind stop and casing.

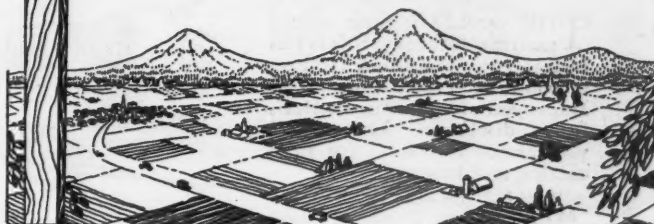
EASE OF ASSEMBLY

- Wedge-joint protection does not mean extra work for the carpenter. The wedge-shaped tongues and grooves are self-aligning, making it quicker than ever to nail up a frame that is as resistant to weather as the solid wood itself.

SUPERIOR FEATURES

- PINE CRAFT frames are available in 100% Idaho White Pine, 100% Ponderosa Pine or combinations of the two.
- PINE CRAFT frames are fitted with Dillon Jam Proof pulleys and Grand Rapids No. 18—both with everlasting bronze bearings . . . and in either lacquer or galvanized finishes.
- PINE CRAFT frames are made right and priced right . . . in the plant of the world's largest producers of pine sash and frames.

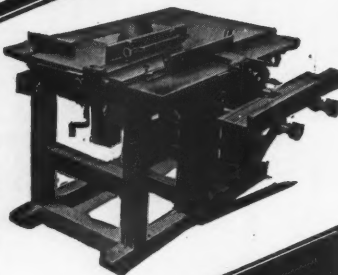
WHITE PINE SASH CO.
SPOKANE, WASH.





Variety WOODWORKER

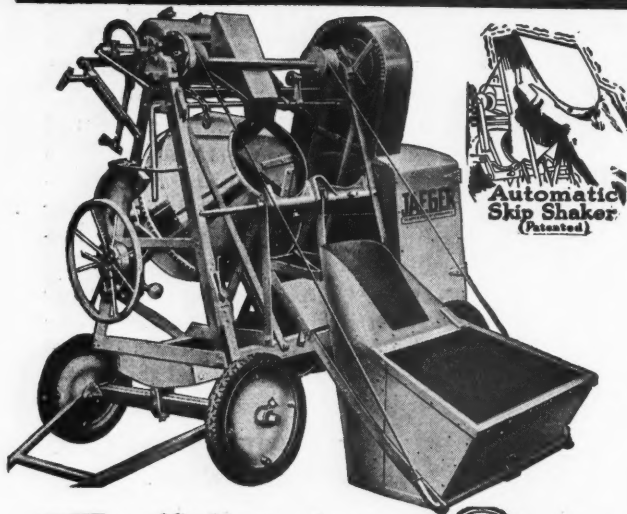
**4 men
can use this
one machine
..... at once!**



Four men can use the Variety Woodworker at one time . . . and turn out as much work and as good work as four machines! That's why users of this remarkable machine can bid lower and make more money. Cut-off Saw, Rip Saw with Boring Attachment, Mortiser and Jointer all in one. Made of better materials for longer service at lower maintenance cost. Every machine guaranteed. Write for literature and prices today. Ask, also, for booklets of other woodworking and saw mill machinery.

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SAW MILL MACHINERY CO.**
60 Main Street Hackettstown, N. J.

Improved JAEGER DUAL-MIX Tilter!



THE world's biggest mixer manufacturer says this is the fastest, easiest handled Timken bearing 78 mixer ever built. Improved Dual-Mix action, faster discharge. Let us tell you about it. Send for new catalog and low prices.

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Priced \$169 up
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N. J., Phoenix, Ariz., Houston, Tex., Pontiac, Mich., Wichita, Kans., Oklahoma City, Okla., Austin, Tex., and Bloomfield, N. J.

It is interesting to note that a number of the cities which lead in residential construction are located within the "commuting zone" of large cities. Thus, Irvington, N. J., Mt. Vernon, N. Y., White Plains, N. Y., Yonkers, N. Y., Bloomfield, N. J., and East Orange, N. J., are all readily reached by home owners who work in New York City. Similarly Lakewood, Ohio, and East Cleveland, Ohio, are suburban to Cleveland, Ohio. But it must be remembered that the five leading cities in residential construction, as listed in the "Monthly Labor Review" article, are selected from the group of 257 identical cities regarding the building activity of which the Department of Labor has obtained data.

Bargains for Home Seekers

Per cubic foot costs for various kinds of construction, credited to Mr. Joseph P. Wolff, commissioner of buildings, show that in the city of Detroit during January, 1931, the costs for all classes of buildings was lower than at any time for which figures are shown, with the exception of August, 1915.

General reports from practically all sections of the country indicate that this condition is true to many other localities. Prospective home owners can obtain more value for their building dollars right now than for any time during the last ten or fifteen years—it is up to you contractors and builders, as well as building material and specialty dealers, to expedite increased building activity by bringing these facts to the attention of your prospects through an intensive and aggressive sales campaign. Building activity has always followed pretty well defined paths in the past, with an upswing following immediately after each decline; construction volume, both in dollar value and number of projects, has touched bottom. The recovery from this time forward, though expected to be steady and not spectacular, seems inevitable.

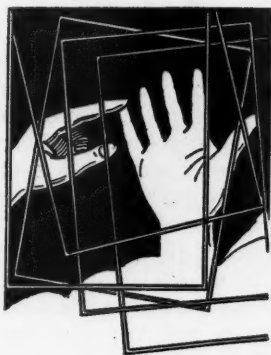
The Cleveland Plan of Home Financing

The Cleveland Builders Supply Company has built 130 houses under its plan of financing. They formed a company and named it the Build-With-Brick Mortgage Company, with a capital of \$50,000. They finance anyone desiring to build a brick house provided:

1. Prospect will reside in house.
2. Lot is fully paid for.
3. Lot is on a street improved with pavement, sidewalk, gas and water.
4. Prospect has at least 10 per cent of the construction cost in cash.
5. The general contractor is named by the mortgage company, with plans subject to the approval of the prospect.

The company has had one contractor build all houses so far completed, but will add others as business requires. The contractor must buy everything from the Cleveland Builders Supply Company, and he has been selected because he is a man with experience and responsibility who will deliver according to his contract, since the Builders Supply must stand behind the house.

Six per cent interest is charged, payable quarterly, and yearly reduction on the principal of 8 per cent is payable in equal monthly installments. The Mortgage is written for a period of one year, with an understanding that the mortgage is to be allowed to remain in force provided all its terms are maintained, until they are able to get a mortgage for the amount then owing from a local bank at 6 per cent interest, without bonus.



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Check these 5 facts
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Flat Glass

1. Perfectly Flat.
2. Graded according to the highest standards.
3. Uniform in thickness and quality.
4. Great tensile strength.
5. A natural fire polish of great lustre and either side may be glazed out.

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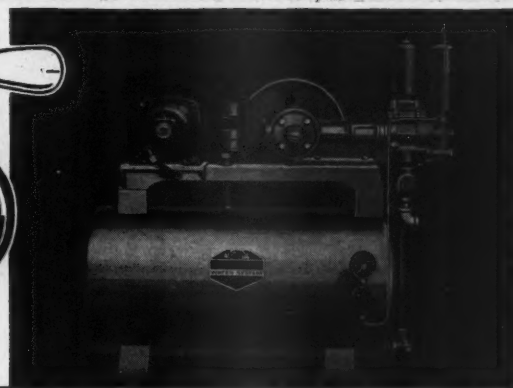
A BRAND YOU



CAN DEPEND UPON

ADAMSTON FLAT GLASS CO.
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THE SILVER PRINCE WATER SYSTEM



RUNNING WATER at Low Cost!

THE Paul Silver Prince Water System illustrated above is a real outfit—300 to 400 gallons capacity per hour at an amazingly low price. This is the job you can sell in competition on a convenient time payment plan. A single unit, complete and compact, automatic air volume control, self oiling, self priming and fully automatic. Get your demonstrator on the floor now and go after business. Write for bulletin today.

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NEW SILVER LAKE SASH CORD in TUBEHANKS & SELF-DISPLAY CARTON

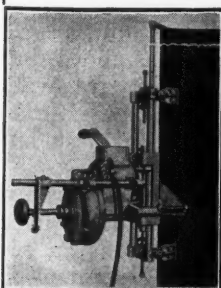
NOW the foremost sash cord offers outstanding sales-clinching features. New Tubebanks eliminate all spiral snarls . . . new telescope, self-display carton stimulates sales. Write for details of this BIG idea.

SILVER LAKE COMPANY NEWTONVILLE, MASS.

**100
PER CENT
COTTON**

Two Sure Ways to Cut Costs on Door Work

Cut Mortises Quickly and Accurately with a
WAPPAT Electric Lock Mortiser



WAPPAT Electric
Lock Mortiser

You can cut four times as many mortises, including lock and face plate, in one operation in an hour with the WAPPAT Electric Lock Mortiser. It's the fastest tool of its kind in the world and with its speed is combined absolute accuracy.

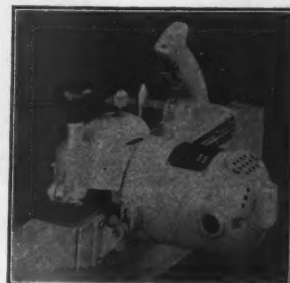
For jobs where electric power is not available use our hand power model.

Write for Complete Information on These Tools

WAPPAT INCORPORATED
7526 Meade St. Pittsburgh, Pa.
Division of Simonds Saw & Steel Co.

Do all your door planing with a **WAPPAT
Electric Door Plane**

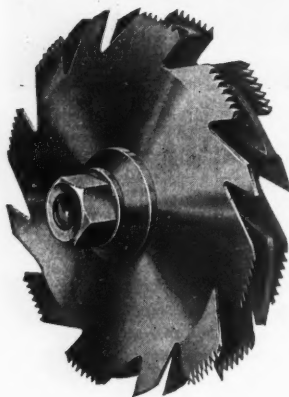
Planes doors, sash, transoms accurately and ten times faster. Direct Drive and Spiral Cutter increases efficiency and gives a clear, clean cut, either with or across the grain of the hardest wood. The light weight permits operation with one hand. Special cutter grinding attachment is standard equipment.



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You need a
HUTHER
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Developed from our own patents, this adjustable groover cuts either with or across the grain. Cutters may be used singly, in pairs or in any combination necessary for desired cut.

Send for one on approval. It may be returned at our expense if unsatisfactory.

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New or existing buildings are prospects for Wright Rubber Tile floors.
Our Installation Instruction Booklet has been instrumental in starting many men in a profitable business. Write for a copy today.
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WRIGHT RUBBER TILE
Rubber Only Material That Withstands Tire Road Wear

Ideas for Bathroom Modernizing

(Continued from page 71)

invested in the manufacture of colored plumbing fixtures in America we have the last and final proof that color has arrived at a definite place on the program of building progress. Some of the manufacturers were slow to take the necessary and expensive steps to equip their plants for the purpose of manufacturing colored ware. They hesitated until they were sure they could manufacture a piece of colored ware that would stand the tests of white enamel and porcelain. Now all this has passed the stage of trial and whatever color or shade one prefers from palest pink and ivory to deep blue and black can be found. These pieces of colored ware meet every requirement of use and beauty.

We have made the rounds of all sources of information regarding colored fixtures especially for the use of the home owner and home builder. They are referred to in the first part of this article. We have pointed out the sales value of color as the plumber sees it, the appeal to the renter on the word of the landlord, the thanks from the woman who is not a stranger to the laundry tub, the wisdom of the hospital authorities and the good business sense of the barber shop owner. Thus we pass on to the buyer and builder the assurance that colored ware is a positive and profitable investment. It will pay dividends in added beauty and style without losing any convenience or sanitary value.

The best in any line or commodity does not follow after the faddist. The proof of the fact that colored ware is no fad lies in the fact that conservative manufacturers are now prepared to furnish any fixture in color. So one is not following a will-of-the-wisp when he decided to install colored fixtures.

The first colored fixtures were old Colonial porcelain. This was the initial step from the pure white. The natural buff-colored ware was made with transparent glaze surface. Slight as the step was it brought a sense of pleasant relief from the monotony of white and the addition of color from that time on has been, in a word, the history of the manufacture of colored ware as we see it today. Years of experimentation on the part of the potteries went into this improvement. Results were often tentative only and orders were always special. The imperfection of the finished pieces made it impossible to put forward any real sales effort. All of this lies in the past history of the development of colored ware and now the largest manufacturers carry adequate stock in the popular models and colors. Heretofore, when every order for color had to be handled as a special one, it required weeks for delivery and the results were often disappointing. Now one decides upon a color scheme and not only can be assured of satisfactory workmanship but can have the help of the tile manufacturers, the flooring specialists and the makers of accessories to bring about a complete color picture.

We have talked with home owners who have only dipped their toes in, as it were, by purchasing color for one bathroom or one colored fixture but now are so favorably impressed by the distinction it has added that they are preparing to use color when they renovate other rooms in the house or build a new home. Breaking away from tradition is a little difficult at first, but one has many gains in recompense.

A fine use of color, and one that almost sells itself, is in the renovation of bathrooms that are being brought up to date. Not only will the room appear as an entirely new one, but the use of color will brighten up

(Continued to page 106)



**Capacity
24,000
Brick
Per Day**

**A Triple Stream of Profit
for You in Your City**

**CONTROL THE BRICK BUSINESS WITH
THIS MACHINE**

LINE-PRODUCTION Has Revolutionized the Brick Business and increased earning power even under present conditions. You simply dump mixed concrete in hopper of this **AUTO-MATIC DUNBRIK MACHINE**, and out come three rows of **PERFECT BRICK IN A CONTINUOUS LINE**—as if by magic.

NEVER BEFORE SUCH LOW COST

Think of making brick for **LESS THAN \$7.00 PER THOUSAND**. Amazing, yet true. No other method or process can approach these figures. Then,—your **CAPACITY** of **24,000 PERFECT UNITS PER DAY**,—stronger brick, more easily laid, and with a keyed bond in wall,—and yet **1/5 LIGHTER**,—EFFECTING A **20% SAVING IN MATERIAL**.

WHAT DUNBRIK MANUFACTURING OFFERS

A **BETTER BRICK** at a **STAGGERING LOW COST** enables you to dominate the brick market in your territory. Your business, investment, and future growth are safeguarded by an **EXCLUSIVE FRANCHISE**. More,—we now have a plan that enables you to become a **DUNBRIK MANUFACTURER** on a **PAY-AS-YOU-PRODUCE** basis. Ask for details.

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This **AUTOMATIC LINE-PRODUCTION DUNBRIK MACHINE** and the improved, better brick, have amazed the building trade. The selection of **DUNBRIK** by Dupont Corp. and its wide acceptance in such cities as Philadelphia, Grand Rapids, Kalamazoo, Flint, in Canada, and in both Eastern and Western centers for all types of construction is proof of its superior qualities, and the progress made by its manufacturers is your guarantee. Get the complete story as told in the **DUNBRIK MANUFACTURING DIGEST**. Send for a copy of this book today. No obligation.

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BIG SAVINGS
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Cost per 1000 from Operating Plant	
Cement	193
Sand	189
Labor	.96
Overhead	1.00
Total	678

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THEN JUDGE THE VALUE!**

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We will welcome your inquiries

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- You can use this portable electric belt sander for finishing wood, metal or stone. Saves hours of labor on hundreds of jobs.

Noser attachment permits sanding right up to vertical obstruction. Powerful motor. Weighs only 18 lbs. Belts 4 1/4".

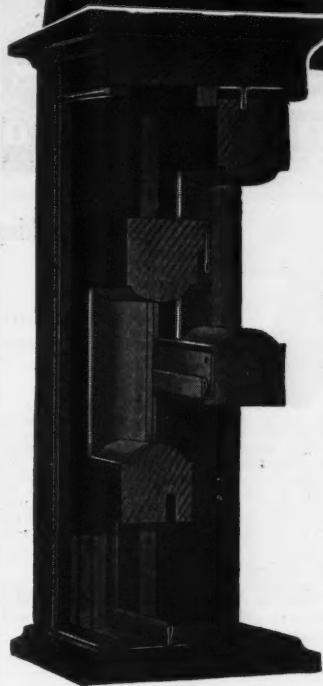
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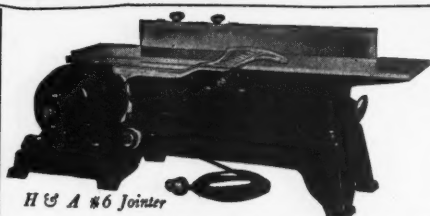
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Ideas for Bathroom Modernizing

(Continued from page 104)

and tone up all surrounding rooms.

The bathroom and kitchen need not continue in the role of being more useful than ornamental. A wide range of colors, as adaptable to the kitchen as to the bathroom, has been standardized so that any taste may be gratified. Not every one would enthuse over a black kitchen sink and yet we have recently seen one installed with such perfect color surroundings that it was a thing of beauty and transformed the kitchen into a room of really distinctive beauty. It had been selected for a kitchen with good window lighting. Soft yellow and black tile with touches of palest gray was used for the baseboard around the room and the cork floor was shiny black. The walls were in canary yellow washable paint with a lighter tone for the ceiling. The picture of that beautiful kitchen will remain with me many a day and I am told repeatedly by the owner that nothing in her new home gives more pleasure than the new kitchen sink.

In the treatment and handling of color in the home or apartment is an opportunity for builder or owner to try out his own cherished schemes for home beautification. He knows he is not sacrificing any utility when he chooses color so why not put life into the kitchen and beauty into the bathroom? We doubt not that much of the feeling of drudgery with which the kitchen was accused in the past was due to the fact that drab colors were thought best for that room. "It is only the kitchen so it does not matter," has given way to "It is the kitchen, therefore it is important." Because they are the kitchen and bathroom, heretofore rooms where "it did not matter," we are all the more assured that much can be done for them to bring them up out of obscurity and to give them the prominence in the house they deserve.

Some practical points come to mind at this thought of home decoration. It is well to remember that all fabrics, materials and media take color differently and that the exact shade is almost never obtained when one is dealing with materials of a different character. For instance, tile, porcelain and vitreous china are to be used in a given bathroom. Since exact duplication of the shades is almost impossible it is well to bear in mind that varying shades of the same color give a very pleasing and softened effect. It would be deadly if we could match perfectly the shade of the bathtub with the walls, lavatory, floor and smaller accessories. For this reason black comes in very conveniently since it is good used in small quantities to tie all shades together and to offer the necessary contrast.

A difference in texture is also desirable. It is a mistake to use a shiny or glazed wall surface when the same glaze appears in the large fixtures of the bathroom or kitchen. We are learning a great deal about glare and how to avoid it and yet obtain a heightened effect of color scheme. Since porcelain, whether in white or color gives off a very decided reflection of light it is a good plan to use dull surfaces wherever possible in a room with porcelain. This can be done by using cork or dull finish tile, dull finish wall paper or underglazed paint and dull material for shower curtain and window curtains. The effect is much more lovely and will by trial be found to be more soothing to the nerves and eyes than if one were met with shiny surfaces at every turn.

(Continued to page 108)

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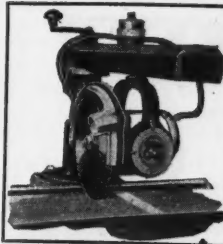
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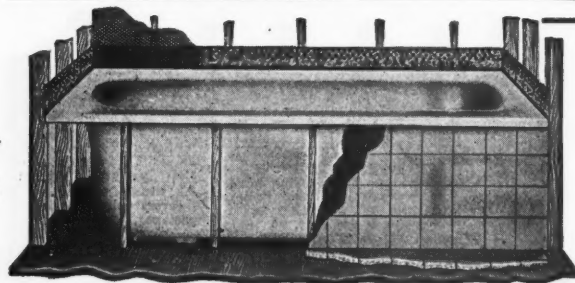
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Ideas for Bathroom Modernizing

(Continued from page 106)

Working with color in the home or apartment brings owner-pride up to the highest pitch. It produces self expression and creativeness and helps to show up hitherto unknown talent in color arrangements and artistic effects. It should be a matter of just pride that the new or renovated house has the latest improvements we can find. Many people do just that thing and yet allow the same old tradition to hold sway when it comes to the bathroom and kitchen fixtures. A home purchaser has a right to expect from the builder as much beauty in the bathroom as in the bedroom or living room.

The more modern the plumbing of bathroom, kitchen and cellar the better the chances are for resale or quick rentals. It is a known fact, backed up by the word of dealers, that 20 per cent to 25 per cent is added in value to the house having the latest approved plumbing equipment. When we realize that the new or modernized home is one of the best investments possible we see how foolish it is to put in anything but the most modern and approved fixtures. Every single plumbing and heating fixture in your house proclaims the news that the house is modern or old style.

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Color is not the sole theme of plumbing progress. The many changes and conveniences seen in the up-to-date plumbing are its chief virtue; but when one can have all the improvements plus beautiful color in the same piece the purchase price is justified in a double way. If the house builder today is buying a blue lavatory it is not merely a blue lavatory where color is the chief asset but one with wider slab space around the bowl, more comfortably shaped and more commodious bowl, combination spout for tempered water where two separate faucets were used before with more of the pipe concealed than in the old-style fixture. These new styles are more sanitary, more easily cleaned and more beautiful in line.

Out of the monotonous white of tradition in bathrooms and kitchens this new color movement has come to us. Now because of it we are exchanging the drabness of yesterday for the richness and harmony of today.

The pendulum of color described a wide arc in the beginning of the color movement, but it has now settled down to a steady swing and we are coming to see how greatly we need this new effect of soft hues and modern decoration. Color has a healing and soothing effect; it wakens the mind to new thoughts because it presents new pictures to the eye; it is revivifying, restful and satisfying. He who is taking advantage of the possibilities for home decoration will be making a fortunate investment both in money and happiness.

In this machine age when life is speeded up more and more all the time we need to take stock of the material things about us that can be utilized to reduce the strain of living. Certainly color wisely used can be called one of these material adjuncts to a more happy life.

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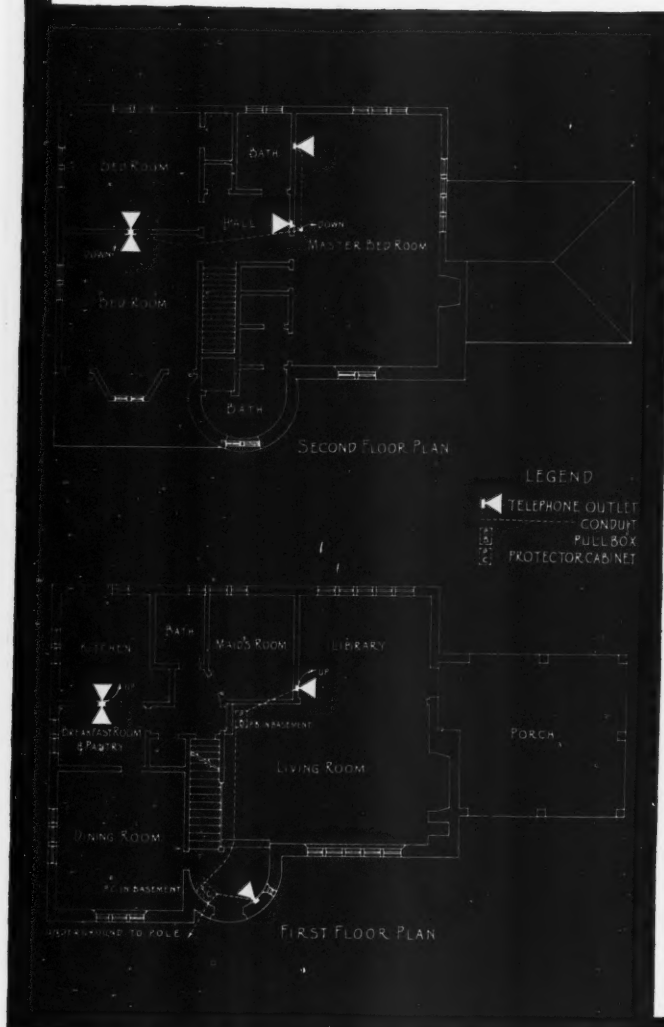
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